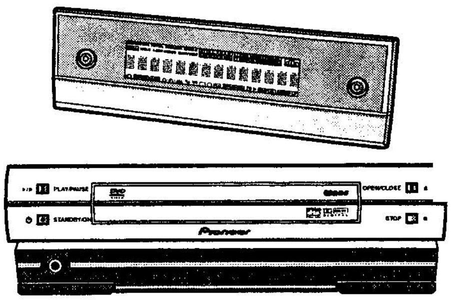
Service Manual

Pioneer



ORDER NO.
RRV2480

DVD/CD TUNER

XV-DV88
XV-DV77

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model		Power Requirement	Region No.	Remarks
	XV-DV88	XV-DV77			
ZVYXJ	○	○	DC power supplied from other system component	2	
ZUCXJ	—	○	DC power supplied from other system component	1	

- **This product is a system(s) component. This product does not function properly independently ; to avoid malfunctions, be sure to connect it to the prescribed system component(s), otherwise damage may result.**
- **Please connect it to the POWERED SUBWOOFER S-DV88SW or S-DV77SW, for adjustment and operation inspection.**

Component	Model		Service manual	Remarks
DVD/CD TUNER	XV-DV88	XV-DV77	RRV2480	This manual.
SPEAKER SYSTEM	—	S-DV77	RRV2473	
SATELLITE SPEAKER	S-DV88ST	S-DV77ST	RRV2486, RRV2473	
POWERED SUBWOOFER	S-DV88SW	S-DV77SW	RRV2474, RRV2473	
MINIDISC RECORDER	MJ-L11		RRV2472	System option
STEREO CASSETTE DECK	CT-L11		RRV2471	System option

CONTENTS

1. SAFETY INFORMATION ········· 2
2. EXPLODED VIEWS AND PARTS LIST ········· 4
3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM ··· 12
4. PCB CONNECTION DIAGRAM ········· 45
5. PCB PARTS LIST ········· 58
6. ADJUSTMENT ········· 66
7. GENERAL INFORMATION ········· 73
   7.1 DIAGNOSIS ········· 73
      7.1.1 SELF-DIAGNOSTIC FUNCTION OF PICKUP DEFECTIVE ········· 73
      7.1.2 TEST POINTS LOCATION ········· 74
      7.1.3 TEST MODE SCREEN DISPLAY ········· 75
      7.1.4 TROUBLE SHOOTING ········· 79
      7.1.5 ERROR CODE ········· 80
      7.1.6 DISASSEMBLY ········· 84
      7.1.7 SINGLE OPERATION METHOD ········· 91
   7.2 PARTS ········· 92
      7.2.1 IC ········· 92
      7.2.2 DISPLAY ········· 95
8. PANEL FACILITIES AND SPECIFICATIONS ··· 96

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T – ZZK JULY 2001

1. SAFETY INFORMATION

This service manual is intended for qualified service technicians ; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING
This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.

Health & Safety Code Section 25249.6 – Proposition 65

NOTICE
(FOR CANADIAN MODEL ONLY)
Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE
(POUR MODÈLE CANADIEN SEULEMENT)
Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

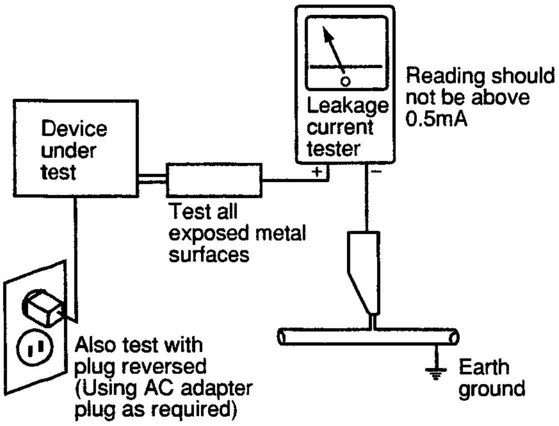
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.


Reading should not be above 0.5mA
Leakage current tester
+
−
Device under test
Test all exposed metal surfaces
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

WARNING !

THE AEL (ACCESSIBLE EMISSION LEVEL) OF THE LASER POWER OUTPUT IS LESS THAN CLASS 1 BUT THE LASER COMPONENT IS CAPABLE OF EMITTING RADIATION EXCEEDING THE LIMIT FOR CLASS 1.

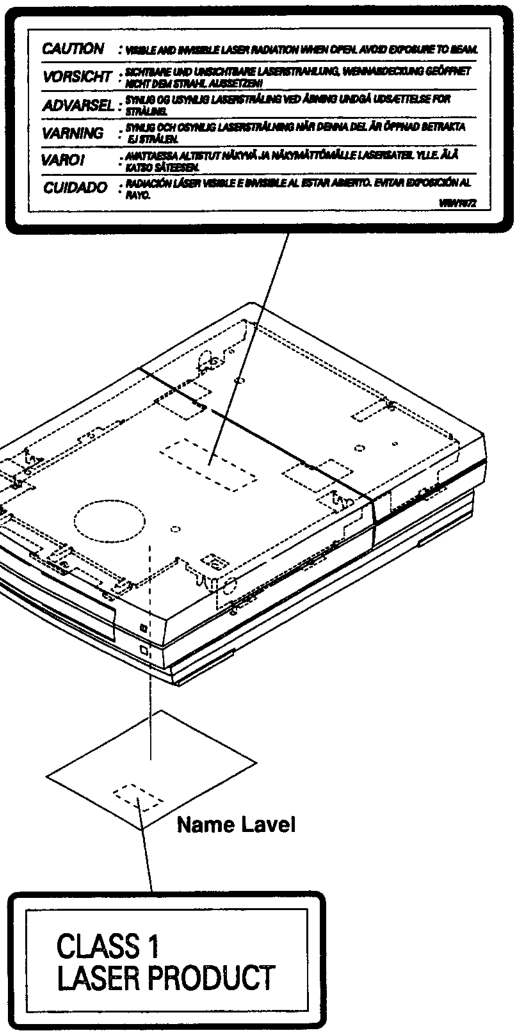
A SPECIALLY INSTRUCTED PERSON SHOULD DO SERVICING OPERATION OF THE APPARATUS.

LASER DIODE CHARACTERISTICS

FOR DVD : MAXIMUM OUTPUT POWER : 5 mW
WAVELENGTH : 650 nm

FOR CD : MAXIMUM OUTPUT POWER : 5 mW
WAVELENGTH : 780 nm

LABEL CHECK (ZVYXJ TYPE ONLY)


CAUTION : VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.
VORSICHT : SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET NICHT DEM STRAHL AUSSETZEN!
ADVARSEL : SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING UNDGÅ UDSÆTTELSE FOR STRÅLING.
VARNING : SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD BETRAKTA EJ STRÅLEN.
VAROI : AVATTAESSA ALTISTUT NÄKYVÄ JA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.
CUIDADO : RADIACIÓN LÁSER VISIBLE E INVISIBLE AL ESTAR ABIERTO. EVITAR EXPOSICIÓN AL RAYO.
Name Lavel
CLASS 1
LASER PRODUCT

Additional Laser Caution

1. Loading-status detection switch (S101 on the LOAB assy) are detected by the microprocessor (IC601 in the DVDM assy).
   - To permit the laser diode to oscillate, it is required to set the loading-status detection switch for the clamp position (the center terminal of S101 is shorted to +3V).
   When the voltage of IC101-pin 20 is +3V and IC601 (microprocessor) - pin 83 is +3V, 650nm laser diode for DVD oscillates in the DVDM Assy.
   When the voltage of IC101-pin 20 is +3V and IC601 (microprocessor) - pin 83 is 0V (GND), 780nm laser diode for CD oscillates in the DVDM Assy.
   In the test mode *, the laser diode oscillates when microprocessor detects a PLAY signal, or when the PLAY key is pressed (KEYL assy), with the above requirements satisfied.

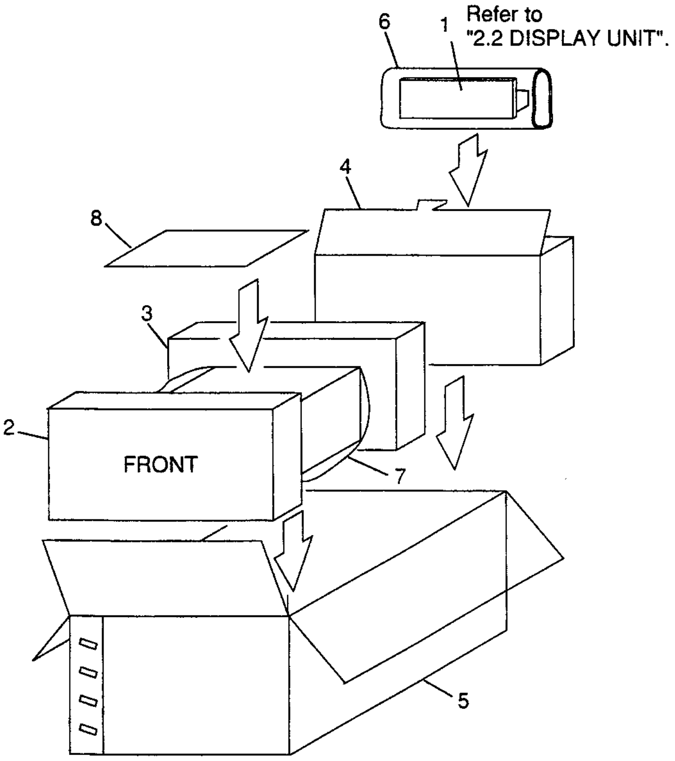
2. When the cover is open, close viewing through the objective lens with the naked eye will cause exposure to the laser beam.

* : See page 73.

2. EXPLODED VIEWS AND PARTS LIST

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Screws adjacent to ▼ mark on the product are used for disassembly.*

2.1 PACKING



(1) PACKING PARTS LIST

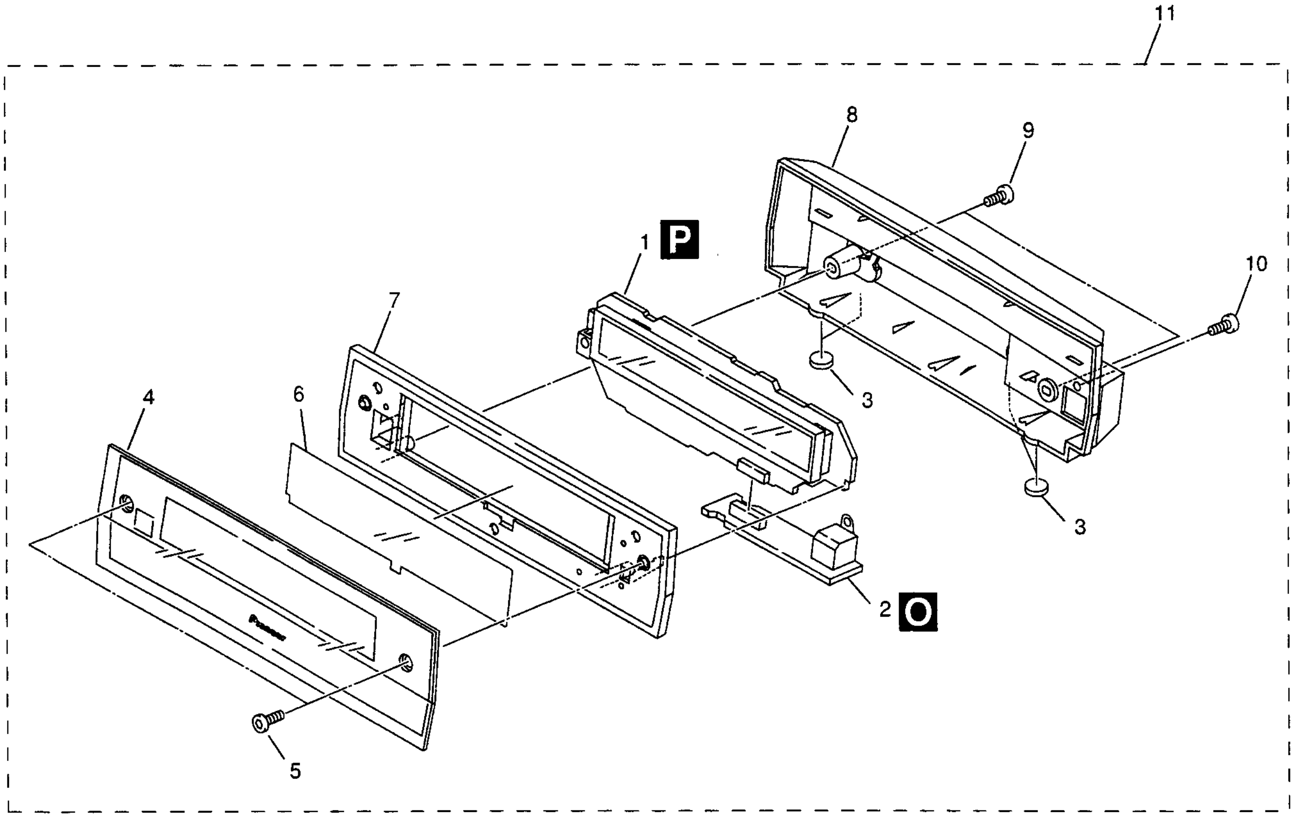
Mark	No.	Description	Part No.
	1	DISPLAY UNIT	AXX7107
	2	Front Pad	AHA7340
	3	Rear Pad	AHA7341
	4	Spacer NS2001	AHB7056
	5	Packing Case	See Contrast table (2)
	6	Packing Sheet	AHG7073
	7	Seat	Z23-007
NSP	8	Warranty Card	See Contrast table (2)

(2) CONTRAST TABLE

XV-DV77/ZVYXJ, ZUCXJ and XV-DV88/ZVYXJ are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.			Remarks
			XV-DV88 /ZVYXJ	XV-DV77 /ZVYXJ	XV-DV77 /ZUCXJ	
	5	Packing Case	AHD8022	AHD7987	AHD7994	
NSP	8	Warranty Card	ARY7022	ARY7022	ARY7045	

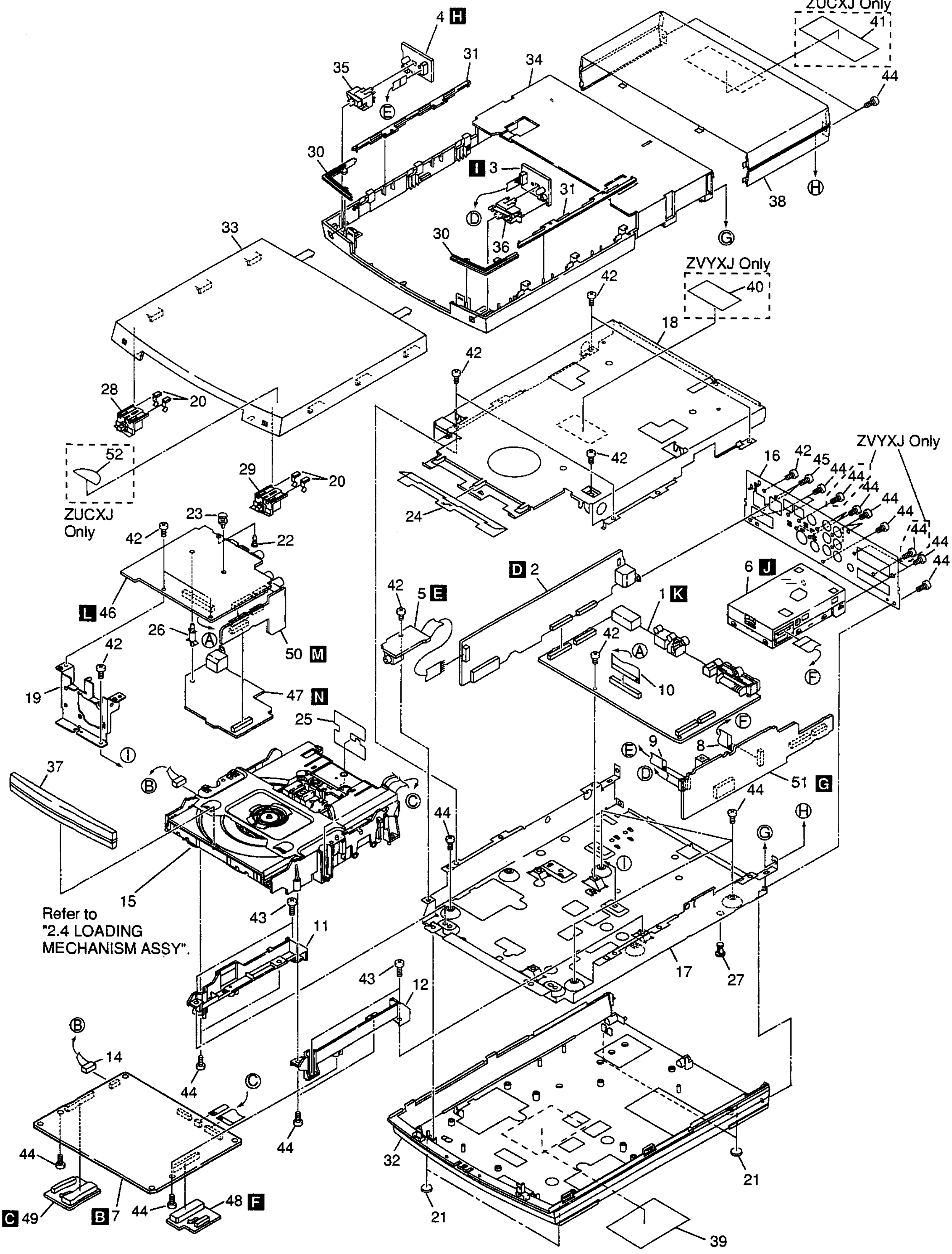
2.2 DISPLAY UNIT



• DISPLAY UNIT PARTS LIST

Mark	No.	Description	Part No.
	1	FLDP ASSY	AWU7854
	2	CNB ASSY	AWU7855
	3	Leg	AEB7090
	4	Window	AAK7889
	5	Deco Screw	ABA7072
	6	FL Filter	AEC7195
	7	Display Panel	AMB7750
	8	Display Cover	AMC7048
	9	Screw	BPZ30P080FZK
	10	Screw	PSC30P080FNI
	11	DISPLAY UNIT	AXX7107

2.3 EXTERIOR


ZUCXJ Only
41
44
4 H
35
31
34
E
30
I 3
D
31
38
H
36
30
G
33
ZVYXJ Only
40
42
18
42
42
28
20
ZUCXJ Only
52
29
20
16
42
45
44
ZVYXJ Only
24
23
22
42
L 46
D 2
42
5 E
6 J
1 K
26
A
42
A
19
50 M
47 N
10
F
25
F
I
37
B
C
9
8
E
D
51 G
44
H
G
15
43
11
17
27
43
12
B
14
44
C
44
32
21
44
C 49
B 7
44
48 F
21
39

Refer to "2.4 LOADING MECHANISM ASSY".

(1) EXTERIOR PARTS LIST

Mark	No.	Description	Part No.
	1	MOTHER ASSY	See Contrast table (2)
	2	SIDEL ASSY	AWU7813
	3	KEYR ASSY	AWU7816
	4	KEYL ASSY	AWU7815
	5	HP ASSY	AWU7814
	6	FM/AM TUNER MODULE	See Contrast table (2)
	7	DVDM ASS'Y	VWS1496
	8	13P F•F•C/60V	ADD7318
	9	9P F•F•C/60V	ADD7320
	10	31P F•F•C/60V	ADD7322
	11	Adapter12 L	ANW7231
	12	Adapter12 R	ANW7232
	13	•••••	
	14	Connector Ass'y	PG05KK-E10
NSP	15	Loading Mecha. Ass'y	VWT1188
	16	Rear Panel	See Contrast table (2)
NSP	17	Bottom Plate	ANF7027
NSP	18	Top Plate	ANF7028
	19	PCB Holder	ANG7359
	20	Sensor Plate	ANG7360
	21	Leg	AEB7090
	22	Rebette	AEC7120
NSP	23	PCB Spacer(3x6)	AEC7156
	24	Lead Barrier	AEC7361
	25	Mecha Barrier	AEC7362
	26	PCB Holder	AEC7364
NSP	27	PC Support	VEC1749
	28	Sensor Button L	AAD7622
	29	Sensor Button R	AAD7623
	30	Illuminate Lens	AAK7896
	31	Side Line	AAP7088
	32	Bottom Base	AMA7025
	33	Top Panel 1	AMB7754
	34	Top Panel 2	AMB7755
	35	Button L Assy	AXG7110
	36	Button R Assy	AXG7111
	37	Tray Cap Assy	See Contrast table (2)
	38	Bonnet	ANE7270
NSP	39	Name Label	See Contrast table (2)
	40	Caution Label	See Contrast table (2)
	41	65 Label	See Contrast table (2)
	42	Screw	BBZ30P060FMC
	43	Screw	BBZ30P100FMC
	44	Screw	BPZ30P080FZK
	45	Screw	PSC30P080FNI
	46	DSP ASSY	See Contrast table (2)
	47	BALANCE ASSY	AWU7808
	48	TRADER ASSY	AWU7809
	49	TRADEL ASSY	AWU7810
	50	JACK ASSY	AWU7811
	51	SIDER ASSY	See Contrast table (2)
NSP	52	Energy Star Label	See Contrast table (2)

(2) CONTRAST TABLE

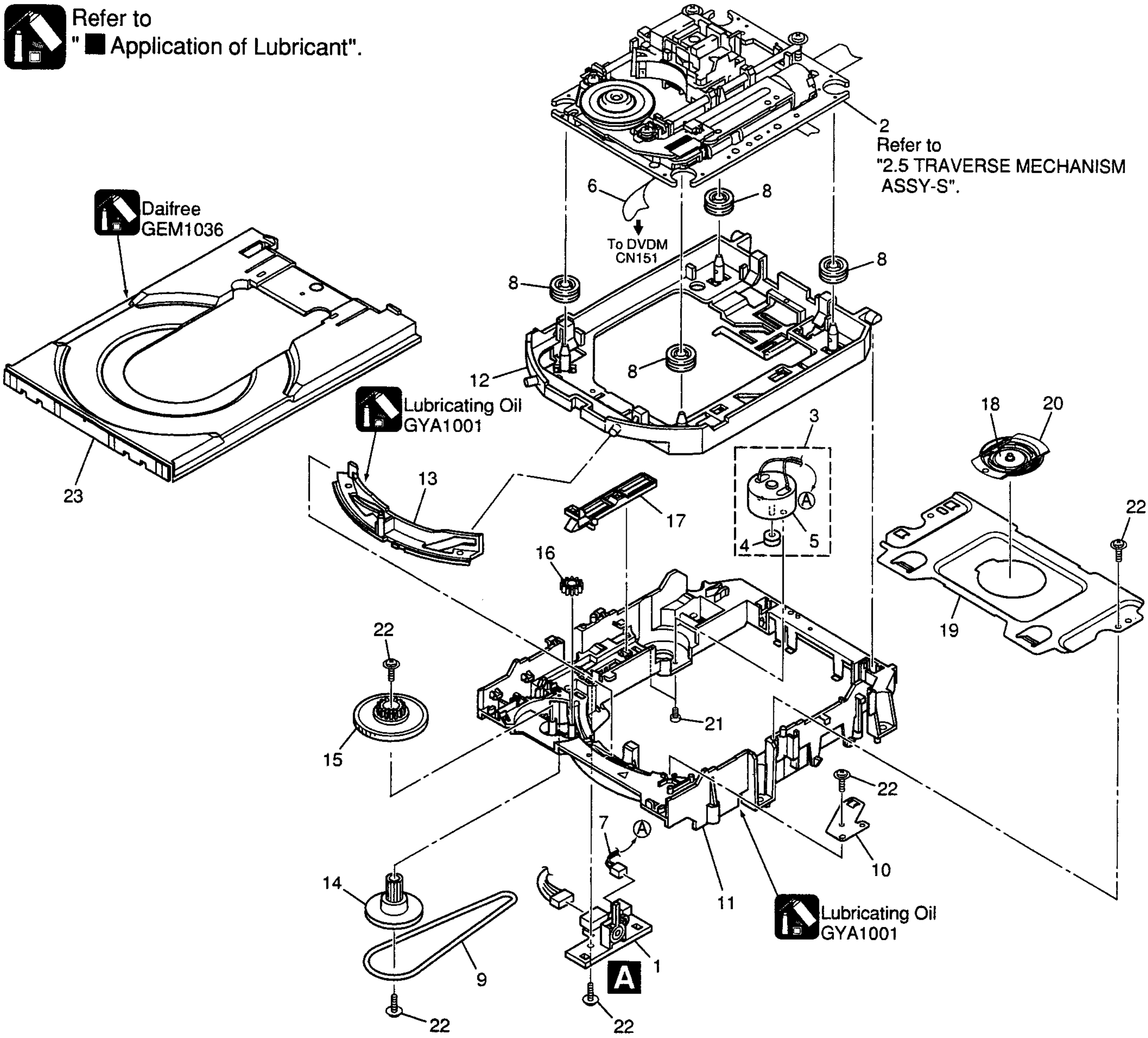
XV-DV77/ZVYXJ, ZUCXJ and XV-DV88/ZVYXJ are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.			Remarks
			XV-DV88 /ZVYXJ	XV-DV77 /ZVYXJ	XV-DV77 /ZUCXJ	
	1	MOTHER ASSY	AWU7817	AWU7806	AWU7818	
	6	FM/AM TUNER MODULE	AXQ7229	AXQ7229	AXQ7228	
	16	Rear Panel	ANC7999	ANC7999	ANC8020	
	37	Tray Cap Assy	AXG7119	AXG7119	AXG7120	
NSP	39	Name Label	AAL7278	AAL7277	AAL7280	
	40	Caution Label	VRW1872	VRW1872	Not used	
	41	65 Label	Not used	Not used	ARW7050	
	46	DSP ASSY	AWU7807	AWU7807	AWU7819	
	51	SIDER ASSY	AWU7812	AWU7812	AWU7820	
NSP	52	Energy Star Label	Not used	Not used	AAX7876	

2.4 LOADING MECHANISM ASSY

Note :

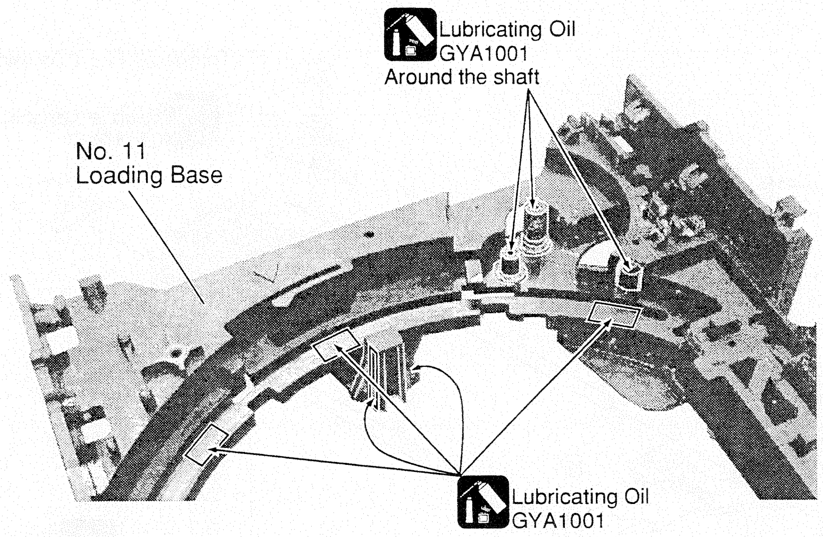
Refer to "■ Application of Lubricant".

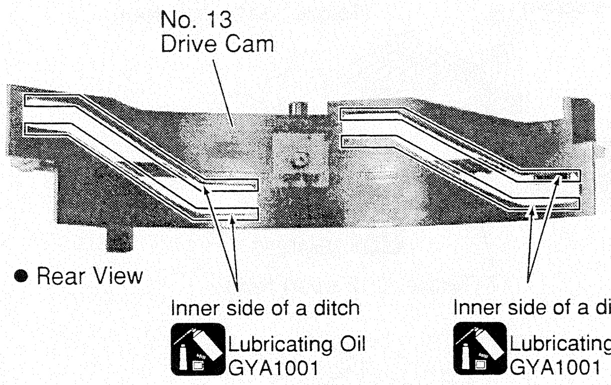

2
Refer to
"2.5 TRAVERSE MECHANISM ASSY-S".
6
To DVDM CN151
8
8
8
8
Daifree
GEM1036
23
12
Lubricating Oil
GYA1001
13
3
Ⓐ
5
4
17
16
18
20
22
19
22
15
21
22
10
7
Ⓐ
14
9
1
A
11
Lubricating Oil
GYA1001
22
22

• LOADING MECHANISM ASSY PARTS LIST

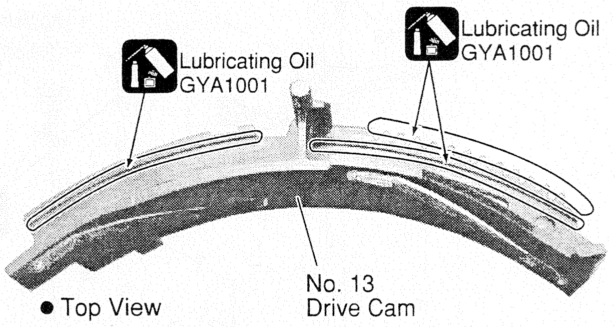
Mark	No.	Description	Part No.
NSP	1	LOAB Assy	VWG2279
	2	Traverse Mechanism Assy-S	VXX2782
	3	Loading Motor Assy	VXX2505
	4	Motor Pulley	PNW1634
	5	Carriage DC Motor / 0.3W	PXM1027
	6	Flexible Cable (26P)	VDA1864
	7	Connector Assy 2P	VKP2253
	8	Float Rubber	VEB1327
	9	Belt	VEB1330
	10	Stabilizer	VNE2253
	11	Loading Base	VNL1917
	12	Float Base DVD	VNL1918
	13	Drive Cam	VNL1919
	14	Gear Pulley	VNL1921
	15	Loading Gear	VNL1922
	16	Drive Gear	VNL1923
	17	SW Lever	VNL1925
	18	Clamper Plate	VNE2251
	19	Bridge	VNE2252
	20	Clamper	VNL1924
	21	Screw	JGZ17P028FMC
	22	Screw	Z39-019
	23	Tray	VNL1920

Application of Lubricant

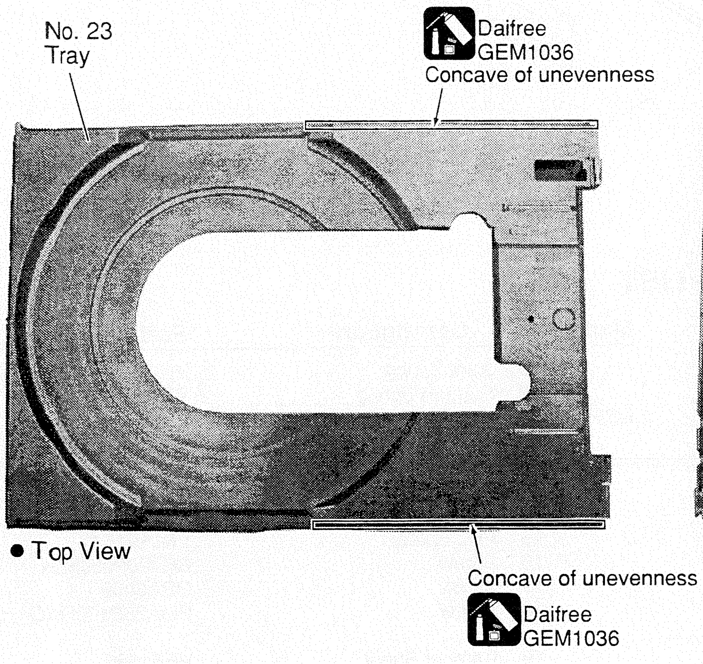

Lubricating Oil
GYA1001
Around the shaft
No. 11
Loading Base
Lubricating Oil
GYA1001


No. 13
Drive Cam
Inner side of a ditch
Lubricating Oil
GYA1001
Inner side of a ditch
Lubricating Oil
GYA1001

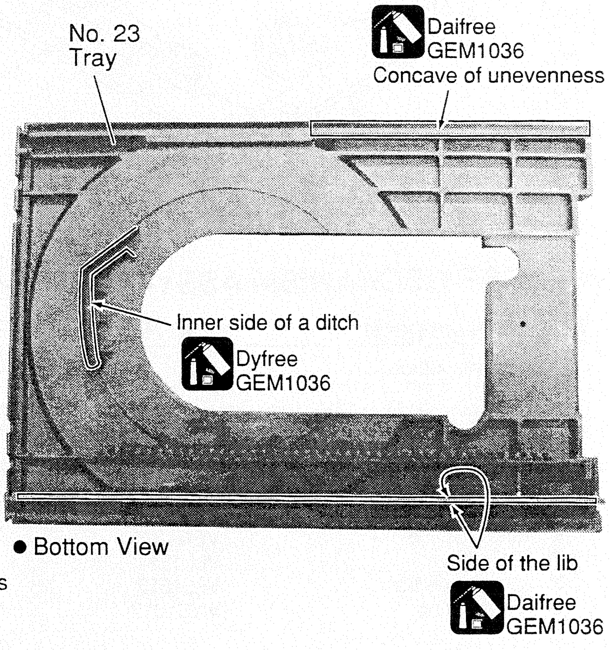
- Rear View


Lubricating Oil
GYA1001
Lubricating Oil
GYA1001
No. 13
Drive Cam

- Top View

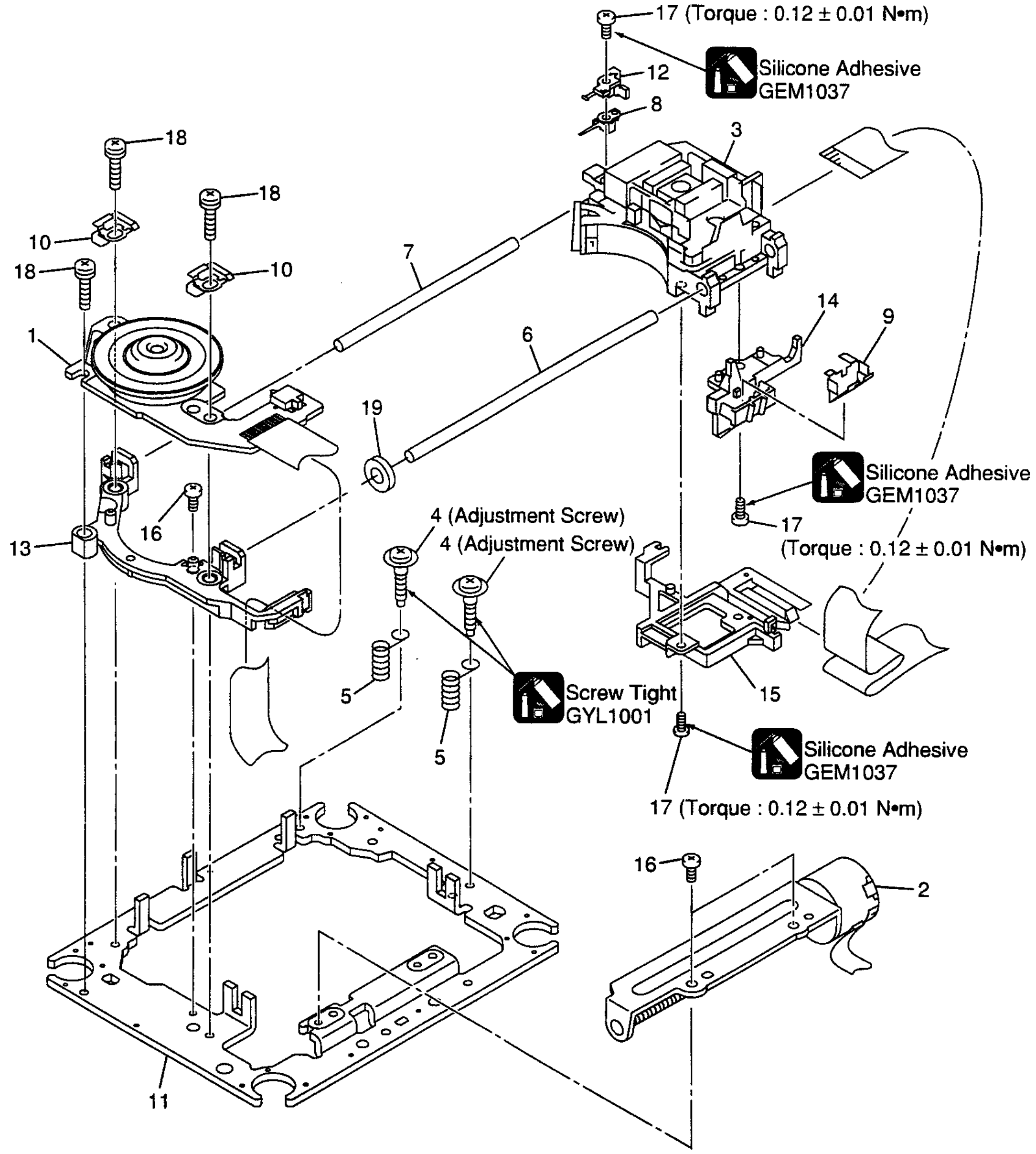

No. 23
Tray
Daifree
GEM1036
Concave of unevenness
Concave of unevenness
Daifree
GEM1036

- Top View


No. 23
Tray
Daifree
GEM1036
Concave of unevenness
Inner side of a ditch
Dyfree
GEM1036
Side of the lib
Daifree
GEM1036

- Bottom View

2.5 TRAVERSE MECHANISM ASSY-S

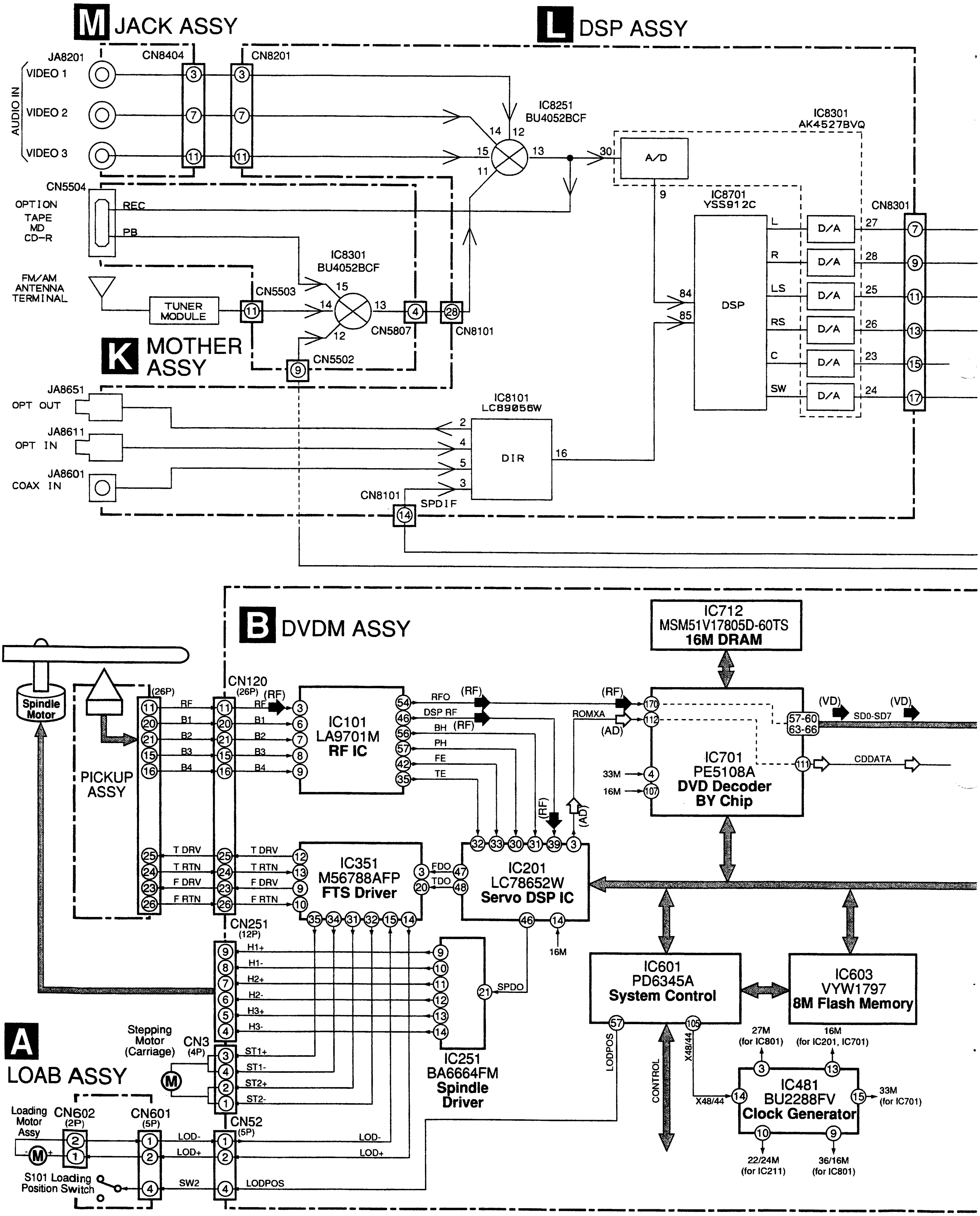

17 (Torque : 0.12 ± 0.01 N•m)
Silicone Adhesive GEM1037
12
8
3
18
18
10
10
18
7
1
6
14
9
19
Silicone Adhesive GEM1037
4 (Adjustment Screw)
4 (Adjustment Screw)
16
13
17
(Torque : 0.12 ± 0.01 N•m)
5
Screw Tight GYL1001
15
5
Silicone Adhesive GEM1037
17 (Torque : 0.12 ± 0.01 N•m)
16
2
11

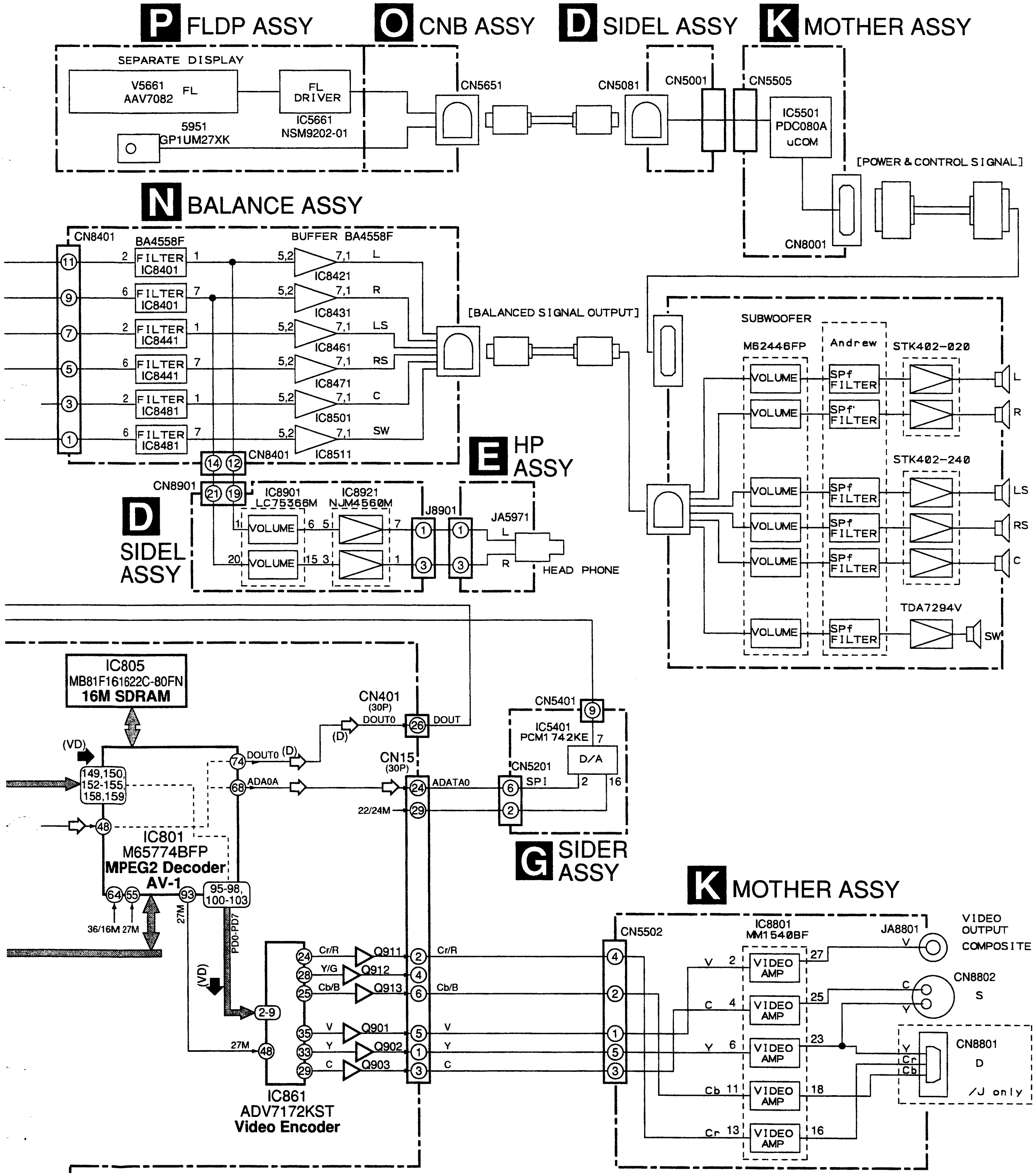
• TRAVERSE MECHANISM ASSY-S PARTS LIST

Mark	No.	Description	Part No.
	1	Spindle Motor	VXM1088 (or VXM1089)
	2	Stepping Motor (CARRIAGE)	VXM1090 (or VXM1091)
	3	Pickup Assy-S	OXX8003
	4	Skew Screw	VBA1080
	5	Skew Spring	VBH1335
	6	Guide Bar	VLL1514
	7	Sub Guide Bar	VLL1515
	8	Hold Spring	VNC1017
	9	Joint Spring	VNC1019
	10	Support Spring	VNC1020
NSP	11	Mechanism Chassis	VNE2248
	12	Slider	VNL1811
	13	Spacer	VNL1913
	14	Joint	VNL1914
	15	FFC Holder	VNL1915
	16	Screw	BBZ20P050FZK
	17	Screw	OBA8009
	18	Screw	PMA26P100FMC
	19	Damper Sheet	VEB1335

3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

3.1 BLOCK DIAGRAM


M JACK ASSY
L DSP ASSY
JA8201
CN8404
CN8201
AUDIO IN
VIDEO 1
VIDEO 2
VIDEO 3
IC8251
BU4052BCF
IC8301
AK4527BVQ
A/D
CN5504
OPTION TAPE MD CD-R
REC
PB
IC8301
BU4052BCF
IC8701
YSS912C
DSP
L
R
LS
RS
C
SW
D/A
CN8301
FM/AM ANTENNA TERMINAL
TUNER MODULE
CN5503
CN5807
CN8101
CN5502
K MOTHER ASSY
JA8651
OPT OUT
JA8611
OPT IN
JA8601
COAX IN
IC8101
LC89056W
DIR
SPDIF
CN8101
B DVDM ASSY
IC712
MSM51V17805D-60TS
16M DRAM
Spindle Motor
PICKUP ASSY
CN120
(26P)
RF
B1
B2
B3
B4
T DRV
T RTN
F DRV
F RTN
IC101
LA9701M
RF IC
RFO
DSP RF
BH
PH
FE
TE
(RF)
ROMXA
(AD)
IC701
PE5108A
DVD Decoder
BY Chip
33M
16M
(VD)
SD0-SD7
CDDATA
IC351
M56788AFP
FTS Driver
FDO
TDO
IC201
LC78652W
Servo DSP IC
16M
CN251
(12P)
H1+
H1-
H2+
H2-
H3+
H3-
SPDO
IC251
BA6664FM
Spindle Driver
IC601
PD6345A
System Control
IC603
VYW1797
8M Flash Memory
LODPOS
CONTROL
X48/44
27M (for IC801)
16M (for IC201, IC701)
IC481
BU2288FV
Clock Generator
33M (for IC701)
22/24M (for IC211)
36/16M (for IC801)
A LOAB ASSY
Stepping Motor (Carriage)
CN3 (4P)
ST1+
ST1-
ST2+
ST2-
M
Loading Motor Assy
CN602 (2P)
CN601 (5P)
CN52 (5P)
LOD-
LOD+
SW2
LODPOS
S101 Loading Position Switch


P FLDP ASSY
O CNB ASSY
D SIDEL ASSY
K MOTHER ASSY
SEPARATE DISPLAY
V5661
AAV7082
FL
FL DRIVER
IC5661
NSM9202-01
5951
GP1UM27XK
CN5651
CN5081
CN5001
CN5505
IC5501
PDC080A
uCOM
[POWER & CONTROL SIGNAL]
CN8001
N BALANCE ASSY
CN8401
BA4558F
BUFFER BA4558F
FILTER IC8401
FILTER IC8441
FILTER IC8481
IC8421
IC8431
IC8461
IC8471
IC8501
IC8511
L
R
LS
RS
C
SW
[BALANCED SIGNAL OUTPUT]
CN8401
CN8901
E HP ASSY
D SIDEL ASSY
IC8901
LC75366M
IC8921
NJM4560M
VOLUME
J8901
JA5971
L
R
HEAD PHONE
SUBWOOFER
M62446FP
Andrew
STK402-020
STK402-240
TDA7294V
VOLUME
SPf FILTER
L
R
LS
RS
C
SW
IC805
MB81F161622C-80FN
16M SDRAM
(VD)
149,150,
152-155,
158,159
IC801
M65774BFP
MPEG2 Decoder
AV-1
95-98,
100-103
36/16M
27M
PD0-PD7
DOUT0
ADA0A
CN401
(30P)
DOUT
CN15
(30P)
ADATA0
22/24M
CN5401
IC5401
PCM1742KE
D/A
CN5201
SPI
G SIDER ASSY
K MOTHER ASSY
IC861
ADV7172KST
Video Encoder
Cr/R
Y/G
Cb/B
V
Y
C
Q911
Q912
Q913
Q901
Q902
Q903
CN5502
IC8801
MM1540BF
VIDEO AMP
JA8801
VIDEO OUTPUT
COMPOSITE
CN8802
S
CN8801
D
/J only
Cb
Cr

(RF) : RF SIGNAL ROUTE

(AD) : AUDIO DATA SIGNAL ROUTE

⇨ : AUDIO SIGNAL ROUTE

(D) : AUDIO (DIGITAL) SIGNAL ROUTE

(VD) : VIDEO DATA SIGNAL ROUTE

➡ : VIDEO SIGNAL ROUTE

(V) : V SIGNAL ROUTE

(Y) : Y SIGNAL ROUTE

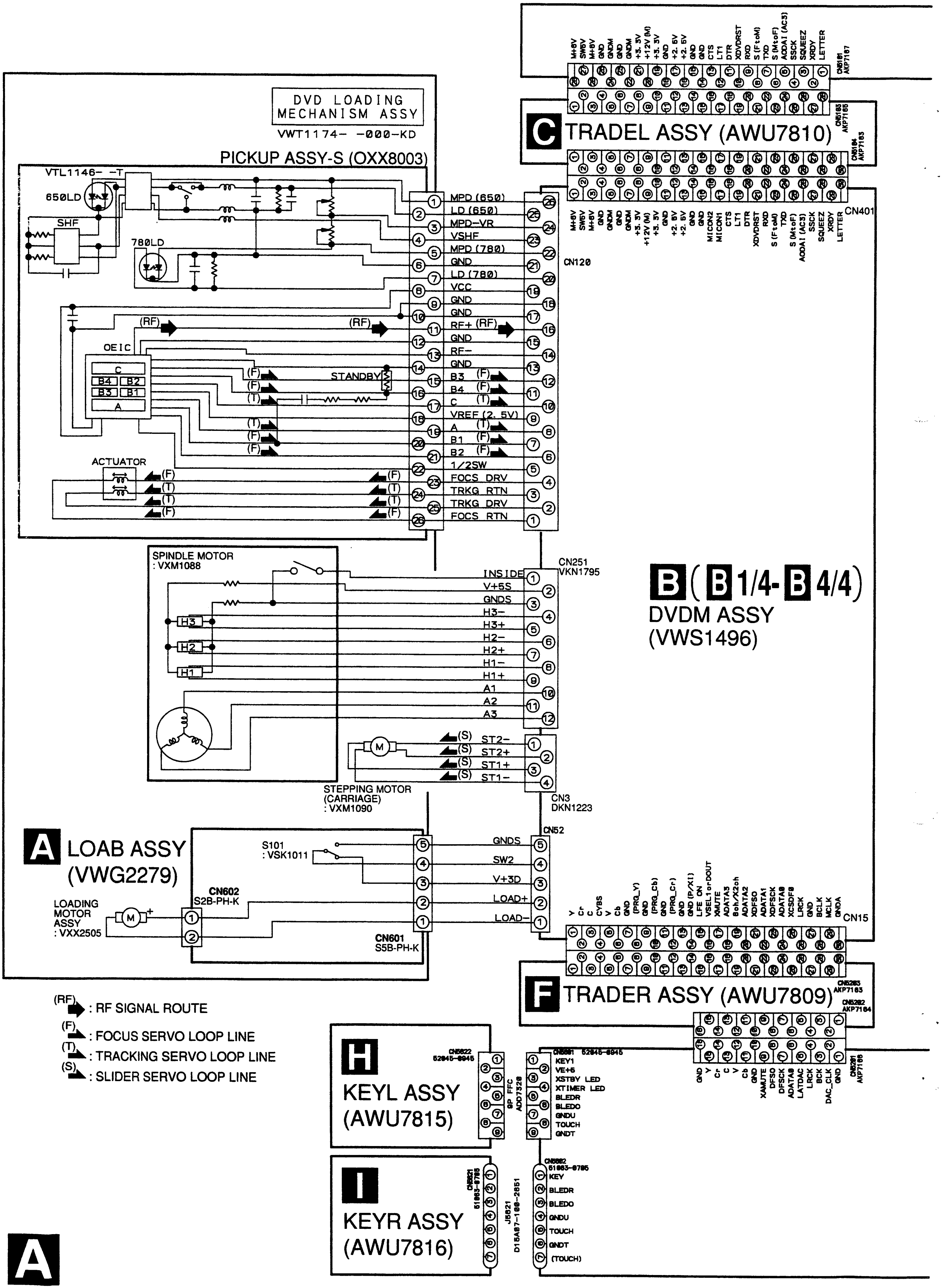
(C) : C SIGNAL ROUTE

(R) : R SIGNAL ROUTE

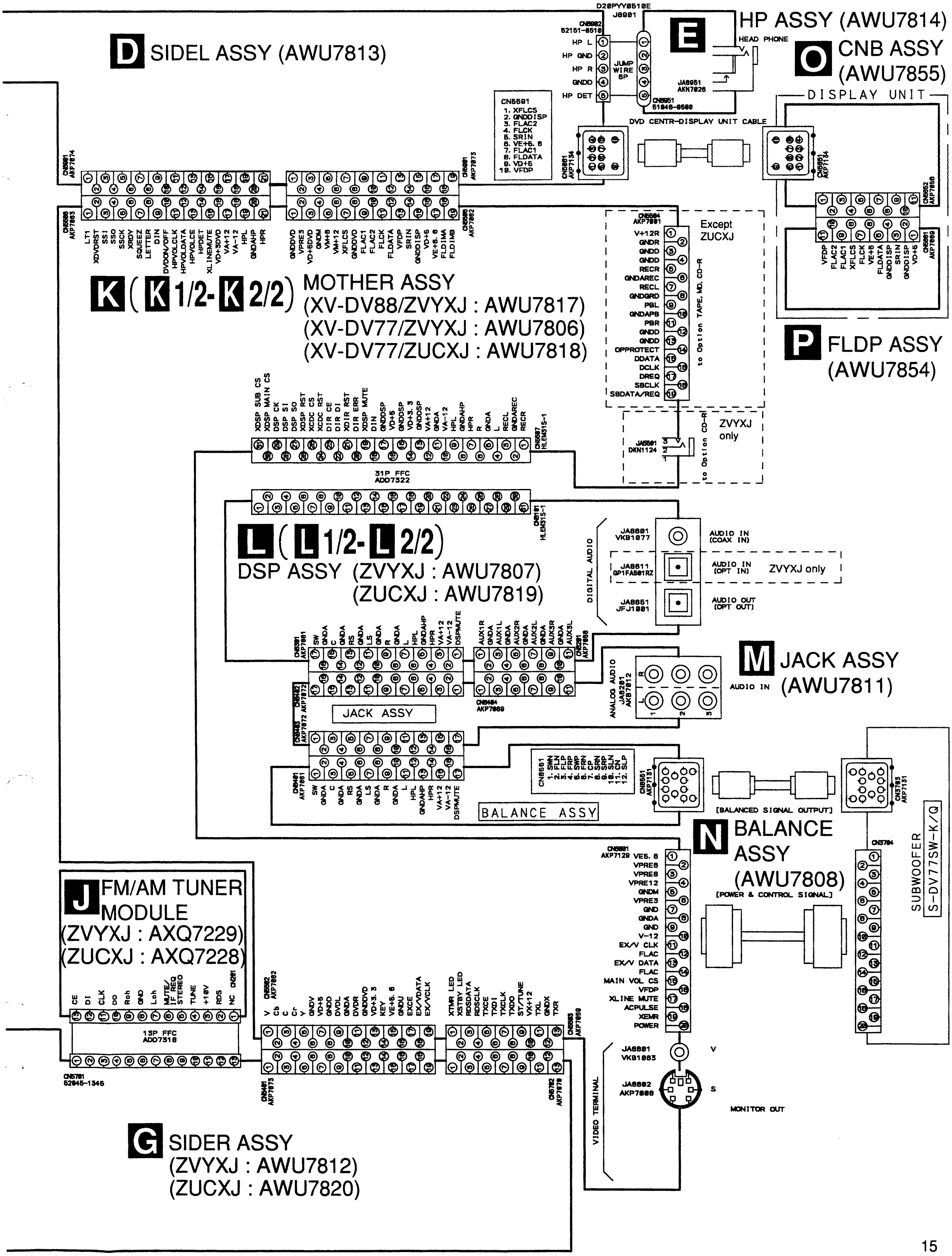
(G) : G SIGNAL ROUTE

(B) : B SIGNAL ROUTE

3.2 OVERALL WIRING CONNECTION DIAGRAM and LOAB ASSY

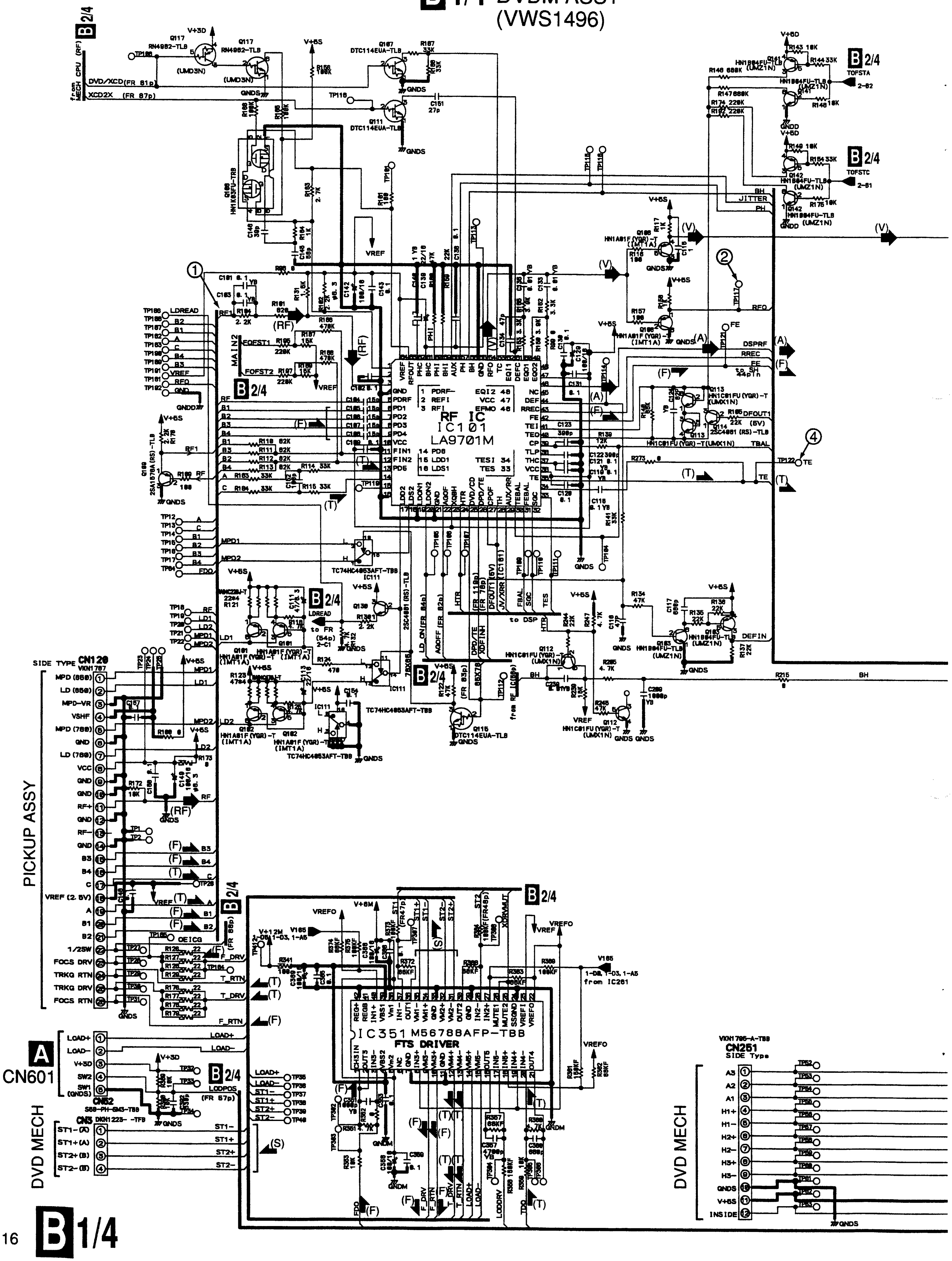

A
B
C
D
DVD LOADING MECHANISM ASSY
VWT1174- -000-KD
PICKUP ASSY-S (OXX8003)
VTL1146- -T
650LD
SHF
780LD
OEIC
C
B4
B2
B3
B1
A
STANDBY
ACTUATOR
(RF)
(F)
(T)
MPD (650)
LD (650)
MPD-VR
VSHF
MPD (780)
GND
LD (780)
VCC
GND
GND
RF+
GND
RF-
GND
B3
B4
C
VREF (2. 5V)
A
B1
B2
1/2SW
FOCS DRV
TRKG RTN
TRKG DRV
FOCS RTN
CN120
SPINDLE MOTOR
: VXM1088
H3
H2
H1
INSIDE
V+5S
GNDS
H3-
H3+
H2-
H2+
H1-
H1+
A1
A2
A3
CN251
VKN1795
M
(S)
ST2-
ST2+
ST1+
ST1-
STEPPING MOTOR
(CARRIAGE)
: VXM1090
CN3
DKN1223
B (B 1/4-B 4/4)
DVDM ASSY
(VWS1496)
C TRADEL ASSY (AWU7810)
M+8V
SW5V
M+8V
GND
GNDM
GND
GNDM
+3. 3V
+12V (M)
+3. 3V
GND
+2. 5V
+2. 5V
GND
GND
CTS
LT1
DTR
XDVDRST
RXD
S (FtoM)
TXD
S (MtoF)
AODAI (AC3)
SSCK
SQUEEZ
XRDY
LETTER
CN5101
AKP7187
CN5103
AKP7165
CN5104
AKP7163
M+8V
SW5V
M+8V
GND
GNDM
GND
GNDM
+3. 3V
+12V (M)
+3. 3V
GND
+2. 5V
+2. 5V
GND
GND
MICON2
MICON1
CTS
LT1
DTR
XDVDRST
RXD
S (FtoM)
TXD
S (MtoF)
AODAI (AC3)
SSCK
SQUEEZ
XRDY
LETTER
CN401
A LOAB ASSY
(VWG2279)
S101
: VSK1011
CN602
S2B-PH-K
LOADING
MOTOR
ASSY
: VXX2505
M
+
CN601
S5B-PH-K
GNDS
SW2
V+3D
LOAD+
LOAD-
CN52
Y
Cr
C
CYBS
V
Cb
GND
(PRG_Y)
GND
(PRG_Cb)
GND
(PRG_Cr)
GND
GND (P/XI)
LFE ON
VSEL1 or DOUT
XMUTE
ADATA3
8ch/X2ch
ADATA2
XDFSO
ADATA1
XDFSCK
ADATA0
XCSDF0
LRCK
GND
BCLK
MCLK
GNDA
CN15
F TRADER ASSY (AWU7809)
CN5203
AKP7183
CN5202
AKP7184
GND
Y
Cr
C
V
Cb
GND
XAMUTE
DFSO
DFSCK
ADATA0
LATDAC
LRCK
BCK
DAC_CLK
GND
CN5201
AKP7186
H
KEYL ASSY
(AWU7815)
CN5622
52045-0945
9P FFC
ADD7320
CN5601 52045-0945
KEY1
VE+5
XSTBY LED
XTIMER LED
BLEDR
BLEDO
GNDU
TOUCH
GNDT
I
KEYR ASSY
(AWU7816)
CN5621
51063-0785
J5621
D15A07-100-2851
CN5602
51063-0785
KEY
BLEDR
BLEDO
GNDU
TOUCH
GNDT
(TOUCH)
(RF) : RF SIGNAL ROUTE
(F) : FOCUS SERVO LOOP LINE
(T) : TRACKING SERVO LOOP LINE
(S) : SLIDER SERVO LOOP LINE

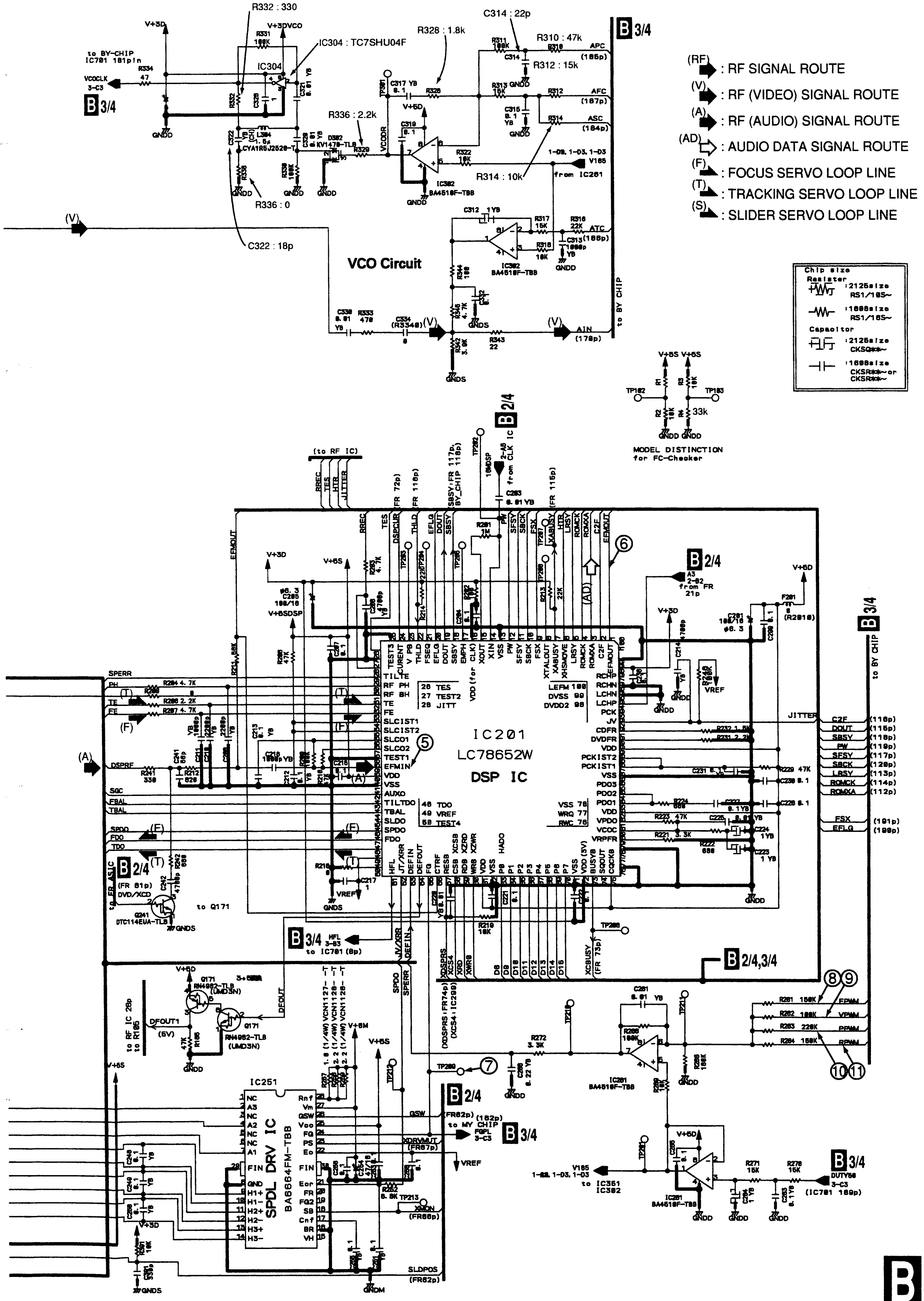
Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".


D SIDEL ASSY (AWU7813)
E HP ASSY (AWU7814)
O CNB ASSY (AWU7855)
DISPLAY UNIT
P FLDP ASSY (AWU7854)
K (K 1/2- K 2/2) MOTHER ASSY
(XV-DV88/ZVYXJ : AWU7817)
(XV-DV77/ZVYXJ : AWU7806)
(XV-DV77/ZUCXJ : AWU7818)
L (L 1/2- L 2/2)
DSP ASSY (ZVYXJ : AWU7807)
(ZUCXJ : AWU7819)
M JACK ASSY (AWU7811)
N BALANCE ASSY (AWU7808)
J FM/AM TUNER MODULE
(ZVYXJ : AXQ7229)
(ZUCXJ : AXQ7228)
G SIDER ASSY
(ZVYXJ : AWU7812)
(ZUCXJ : AWU7820)
D20PYY0510E
J8801
CN8802
52151-0510
HP L
HP GND
HP R
GNDD
HP DET
JUMP WIRE 5P
HEAD PHONE
JA6951
AKN7026
CN6951
51048-0500
DVD CENTR-DISPLAY UNIT CABLE
CN5501
1. XFLCS
2. GNDDISP
3. FLAC2
4. FLCK
5. SRIN
6. VE+5.6
7. FLAC1
8. FLDATA
9. VD+5
10. VFDP
CN5601 AKP7134
CN6951 AKP7134
CN6952 AKP7056
CN5601 AKP7074
CN5602 AKP7073
CN5606 AKP7063
CN5605 AKP7062
LT1
XDVDRST
SSI
SSO
SSCK
XRDY
SQUEEZ
LETTER
DIN
DVDON/OFF
HPVOLCLK
HPVOLDATA
HPVOLCE
HPDET
XLINEMUTE
VD+5DVD
VA+12
VA-12
HPL
GNDAHP
HPR
GNDDVD
VPRE3
VD+5DVD
GNDM
VM+8
VM+12
XFLCS
GNDDVD
FLAC1
FLAC2
FLCK
FLDATA
VFDP
SRIN
GNDDISP
VD+5
VE+5.6
FLDIMA
FLDIMB
VFDP
FLAC2
FLAC1
XFLCS
FLCK
VE+5
FLDATA
GNDDISP
SRIN
GNDDISP
VD+5
CN5601 AKP7089
CN5604 AKP7081
V+12R
GNDR
GNDD
GNDD
RECR
GNDAREC
RECL
GNDGRD
PBL
GNDAPB
PBR
GNDD
GNDD
OPPROTECT
DDATA
DCLK
DREQ
SBCLK
SBDATA/REQ
Except ZUCXJ
to Option TAPE, MD, CD-R
ZVYXJ only
JA5501 DKN1124
to Option CD-R
XDSP SUB CS
XDSP MAIN CS
DSP CK
DSP SI
DSP SO
XDSP RST
XDCC CS
XDCC RST
DIR CE
DIR DI
XDIR RST
DIR ERR
XDSP MUTE
DIN
GNDDSP
VD+5
GNDDSP
VD+3.3
GNDDSP
VA+12
GNDA
VA-12
HPL
GNDAHP
HPR
R
GNDA
L
RECL
GNDAREC
RECR
CN5607 HLEM31S-1
31P FFC ADD7522
CN8101 HLEM31S-1
DIGITAL AUDIO
JA8601 VKB1077
AUDIO IN (COAX IN)
JA8611 GP1FA501RZ
AUDIO IN (OPT IN)
ZVYXJ only
JA8651 JFJ1001
AUDIO OUT (OPT OUT)
CN8301 AKP7061
SW
GNDA
C
GNDA
RS
GNDA
LS
GNDA
R
GNDA
L
HPL
GNDAHP
HPR
VA+12
VA-12
DSPMUTE
AUX1R
GNDA
AUX1L
GNDA
AUX2R
GNDA
AUX2L
GNDA
AUX3R
GNDA
AUX3L
CN8201 AKP7058
CN8402 AKP7072
CN8404 AKP7069
JACK ASSY
ANALOG AUDIO
JA8281 AKB7012
AUDIO IN
R
L
1
2
3
CN8403 AKP7072
CN8401 AKP7061
SW
GNDA
C
GNDA
RS
GNDA
LS
GNDA
R
GNDA
L
HPL
GNDAHP
HPR
VA+12
VA-12
DSPMUTE
CN8551
1. SWN
2. FLN
3. FLP
4. FRP
5. SWP
6. FRN
7. CP
8. SRN
9. SRP
10. SLN
11. CN
12. SLP
CN8551 AKP7131
CN5703 AKP7131
BALANCE ASSY
[BALANCED SIGNAL OUTPUT]
SUBWOOFER
S-DV77SW-K/Q
CN6001 AKP7129
VE5.6
VPRE6
VPRE6
VPRE12
GNDM
VPRE3
GND
GNDA
GND
V-12
EX/V CLK
FLAC
EX/V DATA
FLAC
MAIN VOL CS
VFDP
XLINE MUTE
ACPULSE
XEMR
POWER
CN5704
[POWER & CONTROL SIGNAL]
CE
DI
CLK
DO
Roh
GND
Loh
MUTE/ IF REQ STEREO
TUNE
+10V
RDS
NC
CN201
13P FFC ADD7318
CN5701 52045-1345
CN6602 AKP7062
V
Cb
C
Cr
Y
GNDV
VD+5
GNDD
DVDL
GNDA
DVDR
GNDDVD
VD+3.3
KEY
VE+5.6
GNDU
EXCE
EX/VDATA
EX/VCLK
XTMR LED
XSTBY LED
RDSDATA
RDSCLK
TXCE
TXDI
TXCLK
TXDO
ST/TUNE
VX+12
TXL
GNDX
TXR
CN6603 AKP7059
CN6401 AKP7073
CN5702 AKP7070
JA6601 VKB1003
V
JA6602 AKP7008
S
MONITOR OUT
VIDEO TERMINAL

3.3 DVDM ASSY (1/4)

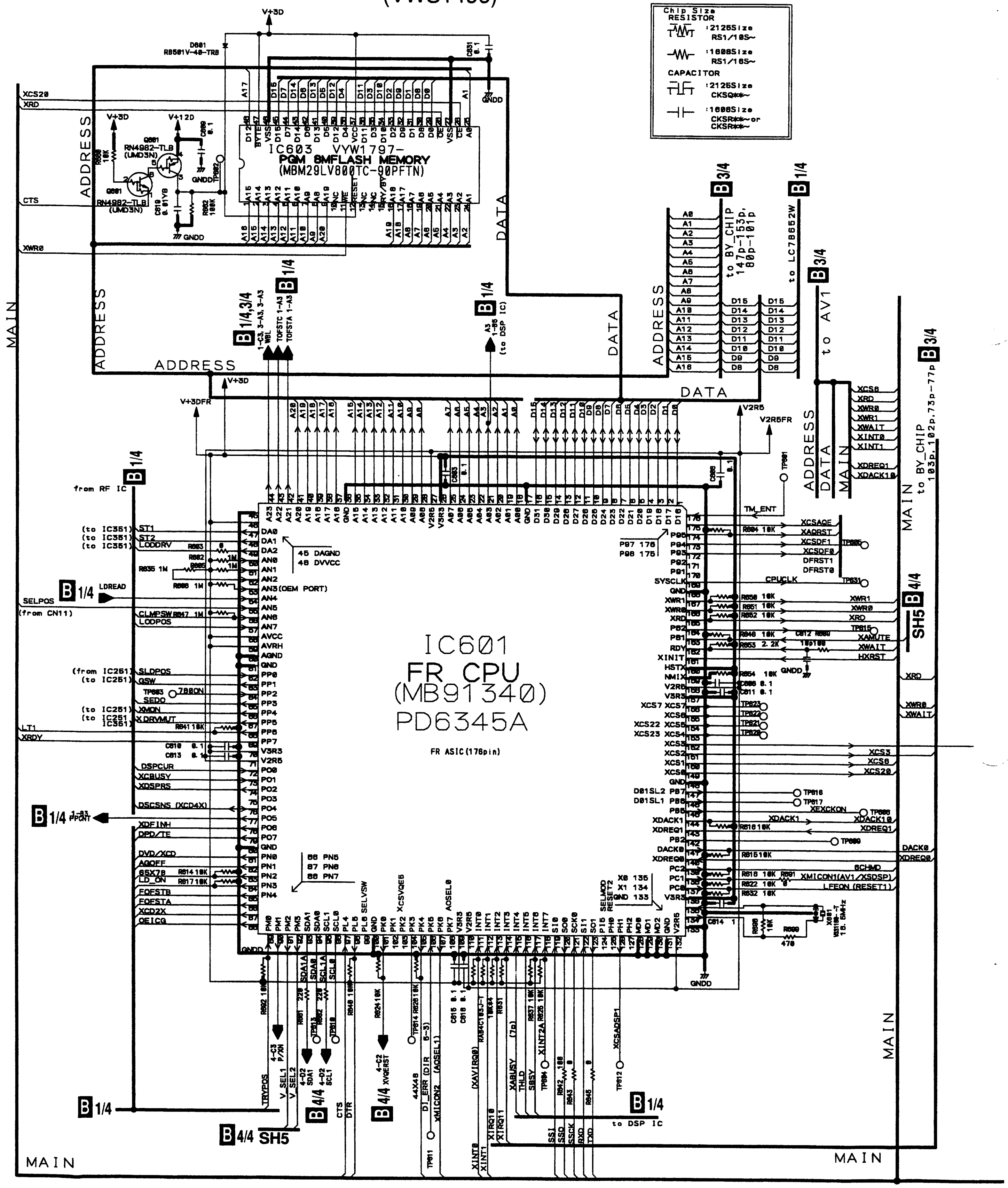
B 1/4 DVDM ASSY
(VWS1496)

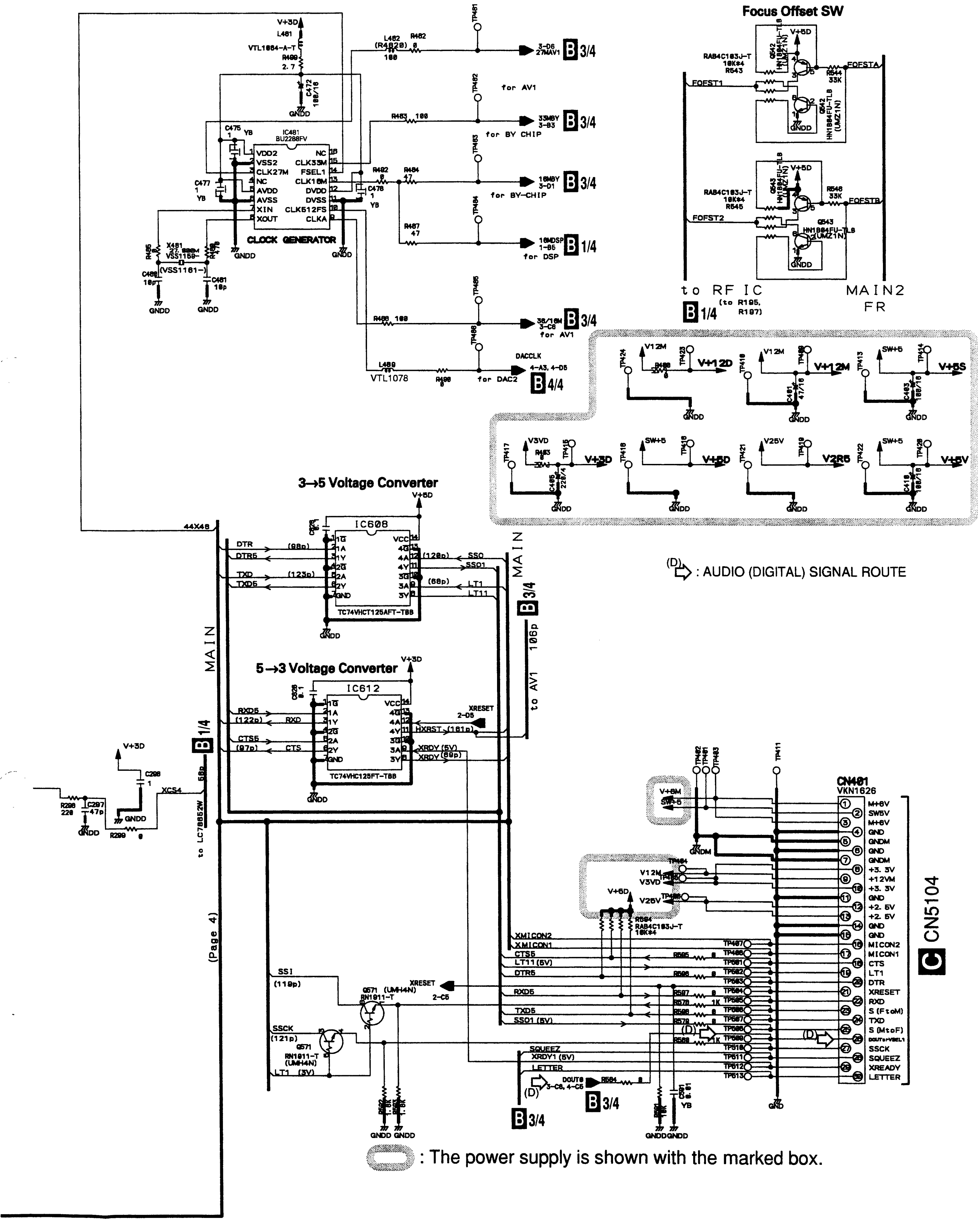

B 2/4
from MECH CPU (RF)
DVD/XCD (FR 61p)
XCD2X (FR 67p)
Q117 RN4982-TLB
(UMD3N)
V+3D
V+6S
Q107 DTC114EUA-TLB
Q111 DTC114EUA-TLB
GNDS
TP116
C151 27p
Q108 HN1K05FU-TRB
VREF
RF IC
IC101
LA9701M
MAIN2
FOFST1
FOFST2
LDREAD
RFO
GNDD
Q109 2SA1576A(RS)-TLB
TC74HC4053AFT-TBB IC111
MPD1
MPD2
FDO
Q101 HN1A01F(YGR)-T (IMT1A)
Q102 HN1A01F(YGR)-T (IMT1A)
Q130 2SC4081(RS)-TLB
to FR (54p) 2-C1
Q115 DTC114EUA-TLB
to DSP
HTR
AGOFF (FR 82p)
LD_ON (FR 84p)
DPD/TE
XDFINH
DFOUT1 (IC161)
JV/XRR
FBAL
SGC
TES
Q112 HN1C01FU(YGR)-T (UMX1N)
Q103 HN1B04FU-TLB (UMZ1N)
Q113 HN1C01FU(YGR)-T (UMX1N)
Q114 2SC4081(RS)-TLB
DFOUT1 (5V)
DEFIN
Q105 HN1A01F(YGR)-T (IMT1A)
Q106 HN1A01F(YGR)-T (IMT1A)
Q141 HN1B04FU-TLB (UMZ1N)
Q142 HN1B04FU-TLB (UMZ1N)
TOFSTA 2-B2
TOFSTC 2-B1
BH
JITTER
PH
DSPRF
RREC
FE
TE
TBAL
to SH 44pin
① ② ④
(V) (A) (F) (T) (RF) (S)
SIDE TYPE CN120 VKN1767
MPD (650)
LD (650)
MPD-VR
VSHF
MPD (780)
GND
LD (780)
VCC
RF+
RF-
B3
B4
C
VREF (2.5V)
A
B1
B2
1/2SW
FOCS DRV
TRKG RTN
TRKG DRV
FOCS RTN
PICKUP ASSY
OEICG
F_DRV
T_RTN
T_DRV
F_RTN
A
CN601
LOAD+
LOAD-
V+3D
SW2
SW1 (GNDS)
CN52 S5B-PH-SM3-TBB
LODPOS (FR 57p)
CN5 DKN1223-TFB
ST1-(A)
ST1+(A)
ST2+(B)
ST2-(B)
DVD MECH
IC351 M56788AFP-TBB
FTS DRIVER
V+6M
V+12M
V165
VREFO
XDRVMUT
1-D8, 1-D3, 1-A5
from IC261
LOADRV
FDO
TDO
GNDM
CN251 VKN1795-A-TBB SIDE Type
A3
A2
A1
H1+
H1-
H2+
H2-
H3+
H3-
GNDS
V+5S
INSIDE
DVD MECH


(RF) : RF SIGNAL ROUTE
(V) : RF (VIDEO) SIGNAL ROUTE
(A) : RF (AUDIO) SIGNAL ROUTE
(AD) : AUDIO DATA SIGNAL ROUTE
(F) : FOCUS SERVO LOOP LINE
(T) : TRACKING SERVO LOOP LINE
(S) : SLIDER SERVO LOOP LINE
Chip size
Resistor
:2125size RS1/10S~
:1608size RS1/16S~
Capacitor
:2125size CKSQ~
:1608size CKSR~ or CKSR~
VCO Circuit
IC304 : TC7SHU04F
R332 : 330
R328 : 1.8k
C314 : 22p
R310 : 47k
R312 : 15k
R336 : 2.2k
R314 : 10k
R336 : 0
C322 : 18p
to BY-CHIP IC701 181pin
VCOCLK
B 3/4
APC (185p)
AFC (187p)
ASC (184p)
ATC (188p)
AIN (178p)
to BY CHIP
IC302 BA4510F-TBB
MODEL DISTINCTION for FC-Checker
33k
B 2/4
IC201
LC78652W
DSP IC
(to RF IC)
B 2/4,3/4
B 3/4
HFL to IC701 (8p)
IC251
SPDL DRV IC
BA6664FM-TBB
IC261 BA4510F-TBB
to MY CHIP FGPL 3-C3
DUTY60 3-C3 (IC701 169p)
V165 1-03, 1-03, 1-03 to IC351 IC302
Q171 RN4982-TLB (UMD3N)
Q241 DTC114EUA-TLB
to RF IC 28p to R165
DFOUT1 (5V)
JITTER
C2F DOUT SBSY PW SFSY SBCK LRSY ROMCK ROMXA FSX EFLG
SLDPOS (FR62p)
GSW
XDRVMUT (FR67p)
XHON (FR66p)
TP289 ⑦
⑤ ⑥ ⑧ ⑨ ⑩ ⑪

3.4 DVDM ASSY (2/4)

B 2/4 DVDM ASSY
(VWS1496)

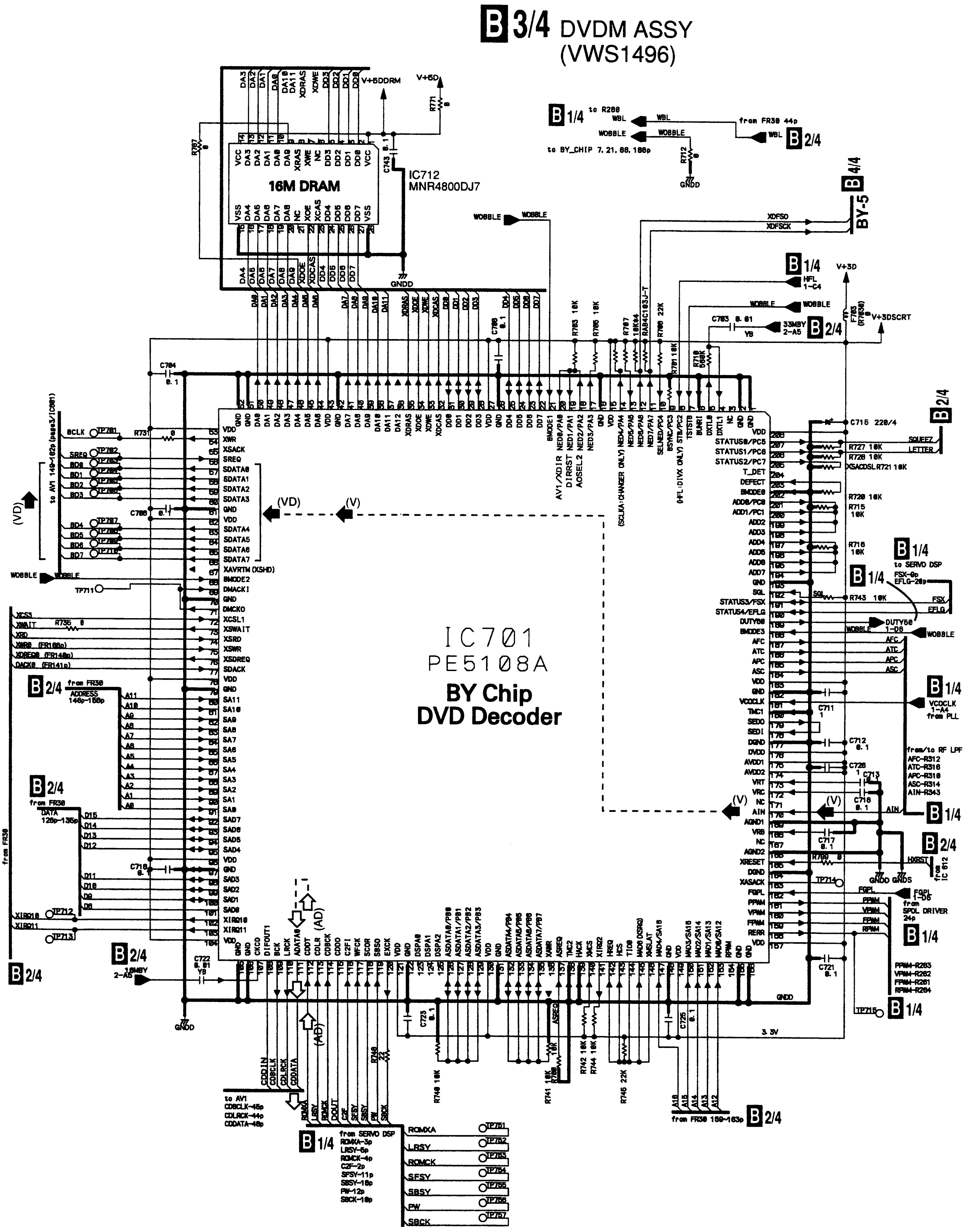

Chip Size
RESISTOR
:2125Size RS1/10S~
:1608Size RS1/16S~
CAPACITOR
:2125Size CKSQ~
:1608Size CKSR~ or CKSR~
IC603 VYW1797-
PGM 8MFLASH MEMORY
(MBM29LV800TC-90PFTN)
D601 RB501V-40-TRB
Q601 RN4982-TLB (UMD3N)
V+3D
V+12D
GNDD
ADDRESS
DATA
MAIN
XCS20
XRD
CTS
XWR0
to BY_CHIP 147p-153p, 80p-101p
to LC78652W
to AV1
to BY_CHIP 103p, 102p, 73p-77p
from RF IC
LDREAD
SELPOS (from CN11)
IC601
FR CPU
(MB91340)
PD6345A
FR ASIC(176pin)
45 DAGND
46 DVVCC
86 PN5
87 PN6
88 PN7
SH5
to DSP IC
B 1/4
B 1/4,3/4
B 3/4
B 4/4
B 4/4 SH5
XDREQ1
XDACK10
XAMUTE
XWAIT
HXRST
XCS3
XCS8
XCS20
DACK0
XDREQ0
8CHMD
XMICON1(AV1/XSDSP)
LFEON (RESET1)
X601 16.9MHz
V_SEL1
V_SEL2
SDA1
SCL1
XVGERST
DI_ERR (DIR 5-3)
XMICON2 (ACSEL1)
XABUSY
THLD
SBSV
XCSADSP1
SS1
SSD
SSCK
RXD
TXD
XINT0
XINT1
XIRQ10
XIRQ11
DTR


Focus Offset SW
CLOCK GENERATOR
IC481
BU2288FV
VDD2
VSS2
CLK27M
NC
AVDD
AVSS
XIN
XOUT
NC
CLK33M
FSEL1
CLK16M
DVDD
DVSS
CLK512FS
CLKA
V+3D
L481
VTL1084-A-T
X481
27.000M
VSS1160-
(VSS1161-)
GNDD
3-D6
27MAV1
B 3/4
for AV1
33MBY
3-B3
for BY CHIP
16MBY
3-D1
for BY-CHIP
16MDSP
1-B5
for DSP
B 1/4
38/16M
3-C6
for AV1
DACCLK
4-A3, 4-D5
L489
VTL1078
for DAC2
B 4/4
RAB4C103J-T
10K*4
R543
R545
Q542
Q543
HN1B04FU-TLB
(UMZ1N)
V+5D
FOFST1
FOFST2
FOFSTA
FOFSTB
R544
33K
R546
33K
to RF IC
(to R195, R197)
MAIN2
FR
V+12D
V+12M
V+5S
V+3D
V+5D
V2R5
V+5V
V12M
SW+5
V3VD
V25V
GNDD
3→5 Voltage Converter
IC608
TC74VHCT125AFT-TBB
DTR
DTR5
TXD
TXD5
SSO
SSO1
LT1
LT11
MAIN
B 3/4
106p
to AV1
5→3 Voltage Converter
IC612
TC74VHC125FT-TBB
RXD5
RXD
CTS5
CTS
XRESET
2-D5
HXRST
XRDY (5V)
XRDY
MAIN
B 1/4
44X48
XCS4
to LC78652W
(Page 4)
SSI
SSCK
Q571
(UMH4N)
RN1911-T
XRESET
2-C5
LT1 (3V)
SQUEEZ
XRDY1 (5V)
LETTER
DOUT0
3-C8, 4-C5
(D)
B 3/4
R584
RAB4C103J-T
10K*4
V+8M
SW+5
GNDM
V12M
V3VD
V25V
V+5D
XMICON2
XMICON1
CTS5
LT11 (5V)
DTR5
RXD5
TXD5
SSO1 (5V)
CN401
VKN1626
① M+8V
② SW5V
③ M+8V
④ GND
⑤ GNDM
⑥ GND
⑦ GNDM
⑧ +3.3V
⑨ +12VM
⑩ +3.3V
⑪ GND
⑫ +2.6V
⑬ +2.6V
⑭ GND
⑮ GND
⑯ MICON2
⑰ MICON1
⑱ CTS
⑲ LT1
⑳ DTR
㉑ XRESET
㉒ RXD
㉓ S (FtoM)
㉔ TXD
㉕ S (MtoF)
㉖ DOUT or VSEL1
㉗ SSCK
㉘ SQUEEZ
㉙ XREADY
㉚ LETTER
C CN5104

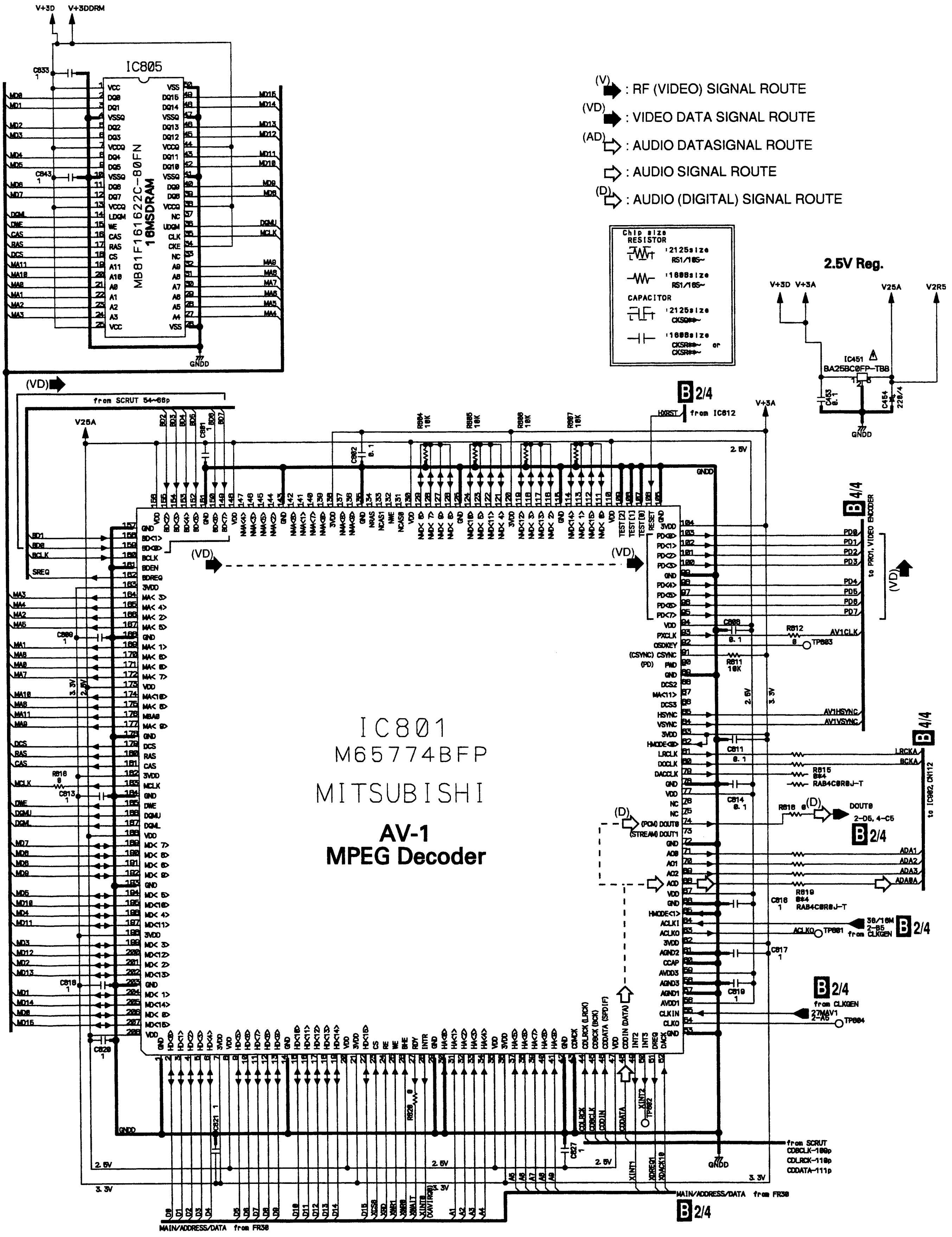
(D) : AUDIO (DIGITAL) SIGNAL ROUTE

▢ : The power supply is shown with the marked box.

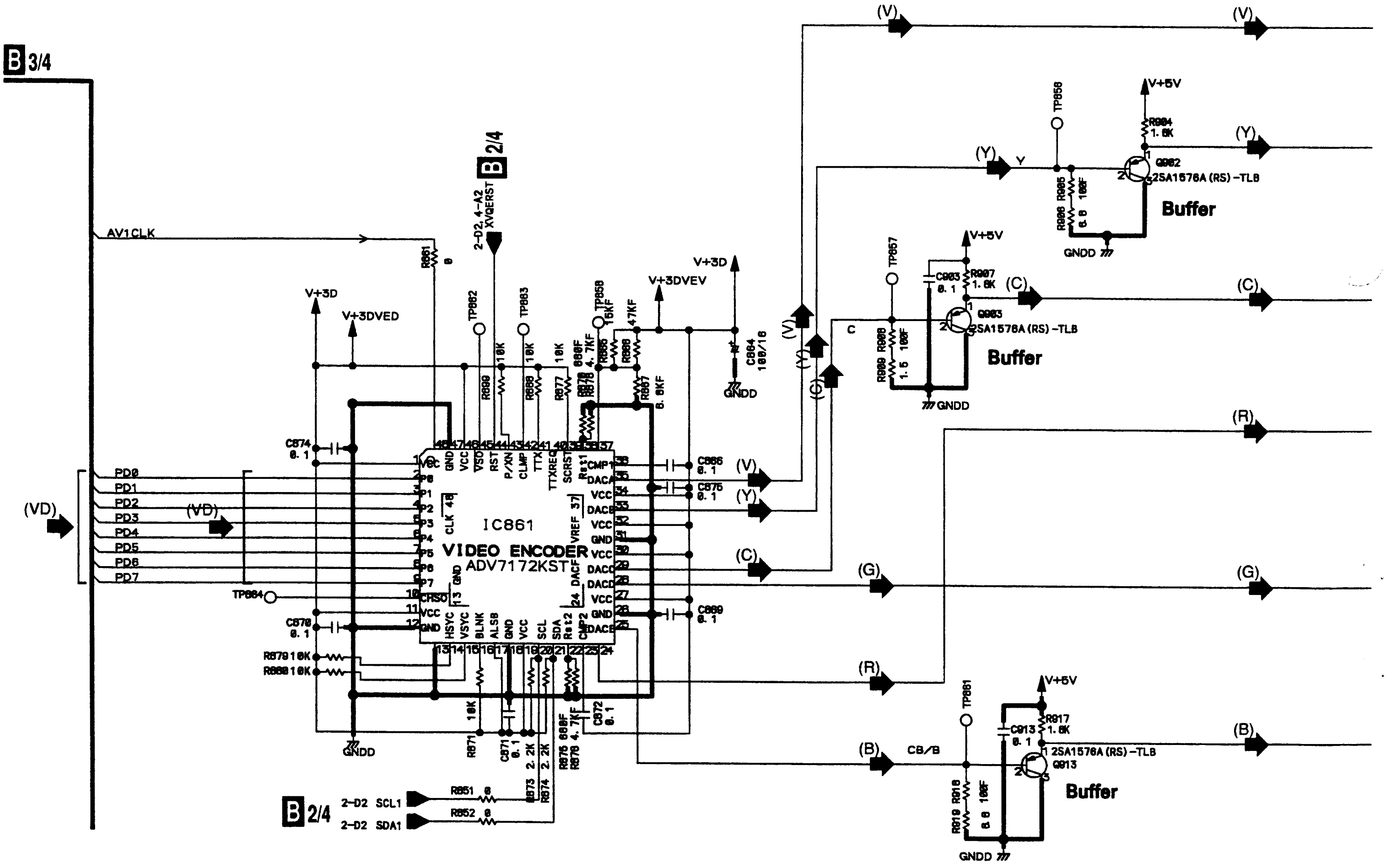
3.5 DVDM ASSY (3/4)



B 3/4 DVDM ASSY
(VWS1496)
16M DRAM
IC712
MNR4800DJ7
V+5DDRM
V+5D
R771 0
R767 0
C743 0.1
GNDD
B 1/4 to R280 WBL
WOBBLE
to BY_CHIP 7, 21, 60, 186p
from FR30 44p
WBL
B 2/4
R712 0
B 4/4
BY-5
XDFSO
XDFSCK
B 1/4 HFL 1-C4
V+3D
WOBBLE
C703 0.01 YB
33MBY 2-A5
B 2/4
F703 (R7030)
V+3DSCRT
C706 0.1
R703 10K
R705 10K
R707 10K×4
RA84C103J-T
R709 22K
R701 10K
R710 560K
C704 0.1
C715 220/4
B 2/4
SQUEEZ
LETTER
R727 10K
R728 10K
XSACDSL R721 10K
R720 10K
R715 10K
R716 10K
B 1/4 to SERVO DSP FSX-9p EFLG-28p
B 1/4
R743 10K
FSX
EFLG
DUTY50 1-D8
WOBBLE
AFC
ATC
APC
ASC
B 1/4 VCOCLK 1-A4 from PLL
C711 1
C712 0.1
C726 1
C713 1
C716 0.1
from/to RF LPF
AFC-R312
ATC-R316
APC-R310
ASC-R314
AIN-R343
AIN
B 1/4
B 2/4
C717 0.1
R789 0
HXRST
from IC 612
GNDD GNDS
TP714
FGPL 1-D5
from SPDL DRIVER 24p
PPWM
VPWM
FPWM
RPWM
B 1/4
C721 0.1
PPWM-R283
VPWM-R282
FPWM-R281
RPWM-R284
TP715
B 1/4
IC701
PE5108A
BY Chip
DVD Decoder
(VD)
(V)
(AD)
BCLK TP701
R731 0
SREQ TP702
BD0 TP703
BD1 TP704
BD2 TP705
BD3 TP706
BD4 TP707
BD5 TP708
BD6 TP709
BD7 TP710
to AV1 149-162p (page3/IC801)
C705
WOBBLE
TP711
XCS3
XWAIT
R735 0
XRD
XWR0 (FR166p)
XDREQ0 (FR148p)
DACK0 (FR141p)
B 2/4 from FR30 ADDRESS 148p-158p
A11 A10 A9 A8 A7 A6 A5 A4 A3 A2 A1 A0
B 2/4 from FR30 DATA 128p-135p
D15 D14 D13 D12 D11 D10 D9 D8
C718 0.1
from FR30
XIRQ10 TP712
XIRQ11 TP713
B 2/4
B 2/4
16MBY 2-A5
C722 0.01 YB
GNDD
C723 0.1
C725 0.1
GNDD
3.3V
R740 10K
R741 10K
R768 10K
R742 10K
R744 10K
R745 22K
R749 22
A16 A15 A14 A13 A12
from FR30 159-163p
B 2/4
CDDIN
CDBCLK
CDLRCK
CDDATA
to AV1
CDBCLK-45p
CDLRCK-44p
CDDATA-46p
B 1/4
from SERVO DSP
ROMXA-3p
LRSY-5p
ROMCK-4p
C2F-2p
SFSY-11p
SBSY-10p
PW-12p
SBCK-10p
ROMXA TP751
LRSY TP752
ROMCK TP753
C2F TP754
SFSY TP755
SBSY TP756
PW TP756
SBCK TP757

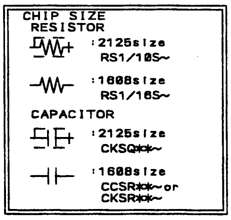

(V) : RF (VIDEO) SIGNAL ROUTE
(VD) : VIDEO DATA SIGNAL ROUTE
(AD) : AUDIO DATASIGNAL ROUTE
: AUDIO SIGNAL ROUTE
(D) : AUDIO (DIGITAL) SIGNAL ROUTE
Chip size
RESISTOR
:2125size RS1/16S~
:1608size RS1/16S~
CAPACITOR
:2125size CKSQ**~
:1608size CKSR**~ or CKSR**~
2.5V Reg.
V+3D V+3A V25A V2R5
IC451
BA25BC0FP-TB8
C453 0.1
C454 220/4
GNDD
V+3D V+3DDRM
C833 1
C843 1
IC805
MB81F161622C-80FN
16MSDRAM
IC801
M65774BFP
MITSUBISHI
AV-1
MPEG Decoder
B 2/4 from IC812
HXRST
V+3A
V25A
from SCRUT 54~68p
B 4/4 to PRO1, VIDEO ENCODER
AV1CLK
AV1HSYNC
AV1VSYNC
R812 0
TP803
R811 10K
C808
C811 0.1
C814 0.1
B 4/4 to IC802, CN112
LRCKA
BCKA
R815 8X4 RAB4C0R0J-T
R818 0
DOUT0 2-D5, 4-C5
B 2/4
ADA1
ADA2
ADA3
ADA0A
R819 8X4 RAB4C0R0J-T
C816 1
36/16M 2-B5 from CLKGEN
B 2/4
ACLKO TP801
C817 1
C819 1
B 2/4 from CLKGEN
27MAV1 2-A6
TP804
R816 0
C813 1
C809 1
C818 1
C820 1
C821 1
C827 1
R826 0
XINT2 TP802
GNDD
2.5V
3.3V
from SCRUT
CDBCLK-109p
CDLRCK-110p
CDDATA-111p
MAIN/ADDRESS/DATA from FR30
B 2/4
R804 10K
R805 10K
R806 10K
R807 10K
C802 0.1
C801 1

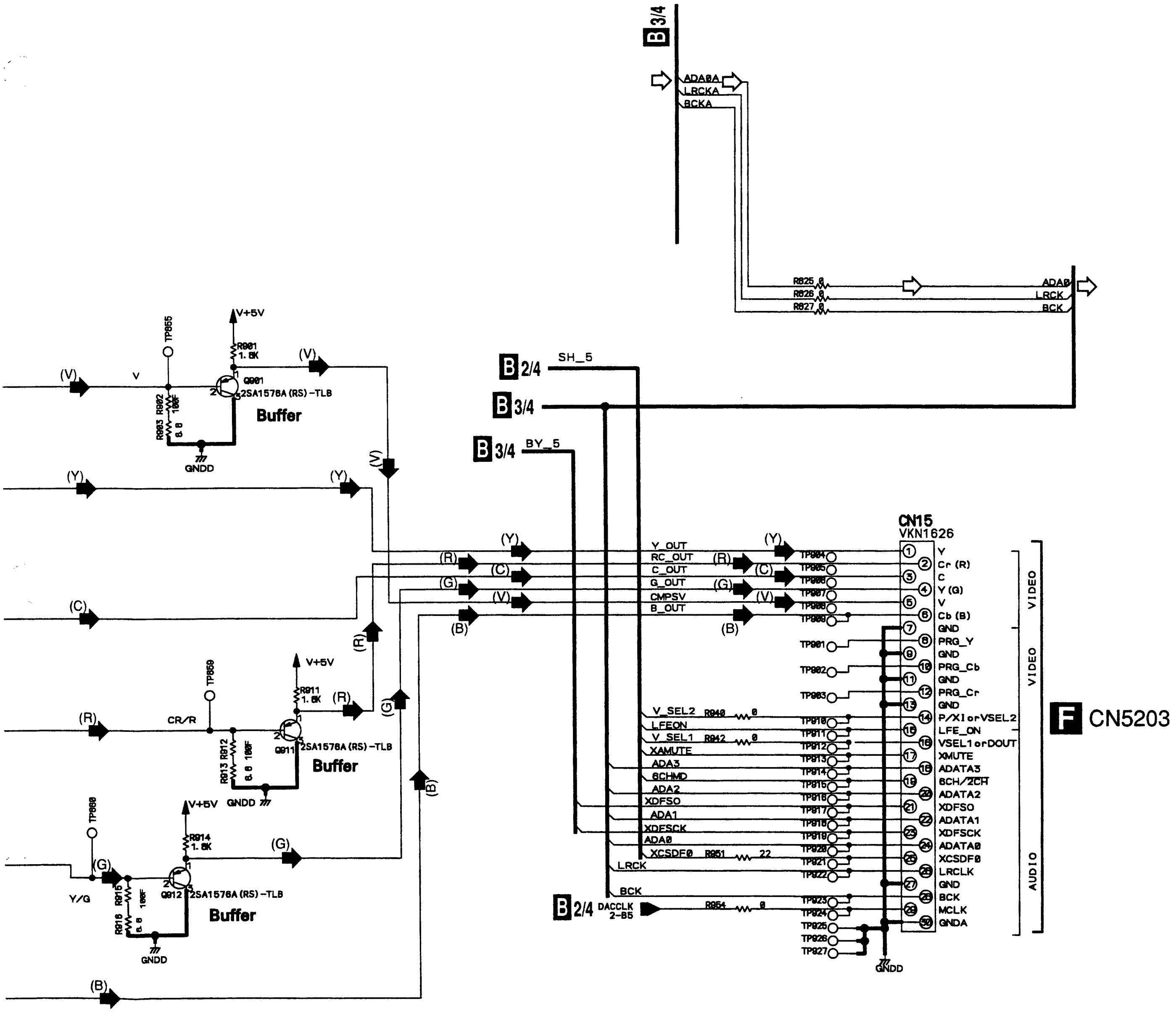
3.6 DVDM ASSY (4/4)


B 3/4
AV1CLK
(VD)
(VD)
PD0
PD1
PD2
PD3
PD4
PD5
PD6
PD7
TP864
R861 0
B 2/4
2-D2, 4-A2
XVQERST
V+3D
V+3DVED
TP862
TP863
TP858
R890 10K
R888 10K
R877 10K
R870 680F
R878 4.7KF
R885 15KF
R886 47KF
R887 6.8KF
V+3DVEV
V+3D
C884 100/16
GNDD
C874 0.1
C870 0.1
R879 10K
R880 10K
IC861
VIDEO ENCODER
ADV7172KST
VCC
P0
P1
P2
P3
P4
P5
P6
P7
CRSO
VCC
GND
GND
VCC
VSO
RST
P/XN
CLMP
TTX
TTXREQ
SCRST
Rst1
CLK 48
GND 13
VREF 37
DACF 24
CMP1
DACA
VCC
DACB
VCC
GND
VCC
DACC
DACD
VCC
GND
DACE
HSYC
VSYC
BLNK
ALSB
GND
VCC
SCL
SDA
Rst2
CMP2
C866 0.1
C875 0.1
C869 0.1
C872 0.1
R871 10K
C871 0.1
R873 2.2K
R874 2.2K
R875 680F
R876 4.7KF
GNDD
B 2/4
2-D2 SCL1
2-D2 SDA1
R851 0
R852 0
(V)
(Y)
(C)
(G)
(R)
(B)
(V)
(V)
(Y)
(C)
(Y)
Y
TP858
V+5V
R904 1.8K
Q902
2SA1576A (RS) -TLB
R905 100F
R906 6.8
GNDD
Buffer
(Y)
TP857
V+5V
C903 0.1
R907 1.8K
(C)
C
Q903
2SA1576A (RS) -TLB
R908 100F
R909 1.5
GNDD
Buffer
(C)
(R)
(G)
(G)
(R)
(B)
CB/B
TP861
V+5V
C913 0.1
R917 1.8K
2SA1576A (RS) -TLB
Q913
R918 100F
R919 6.8
GNDD
Buffer
(B)

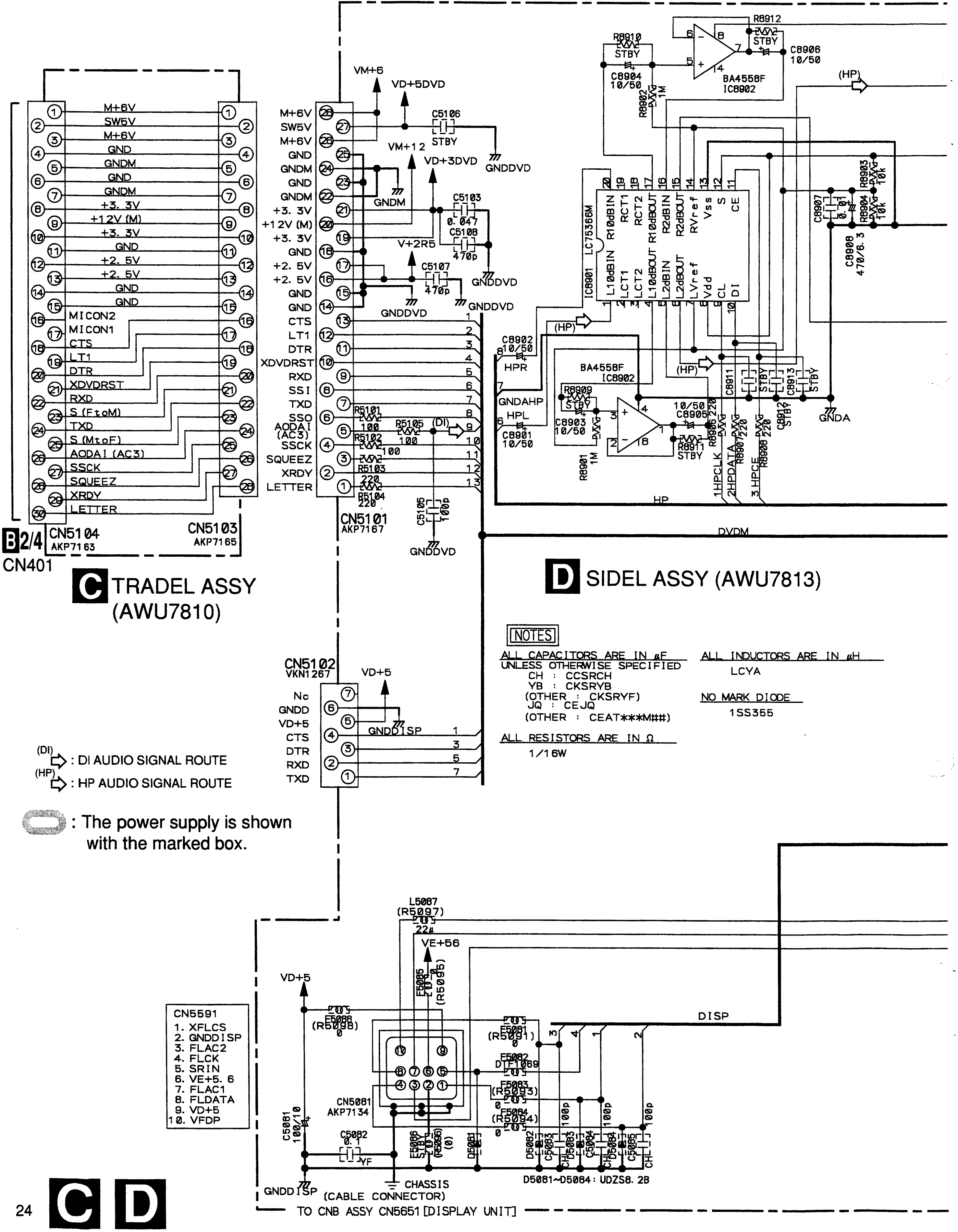
B 4/4 DVDM ASSY (VWS1496)

(VD) ➡ : VIDEO DATASIGNAL ROUTE
(V) ➡ : V SIGNAL ROUTE
(Y) ➡ : Y SIGNAL ROUTE
(C) ➡ : C SIGNAL ROUTE
(R) ➡ : R SIGNAL ROUTE
(G) ➡ : G SIGNAL ROUTE
(B) ➡ : B SIGNAL ROUTE
⇨ : AUDIO SIGNAL ROUTE


CHIP SIZE
RESISTOR
:2125size
RS1/10S~
:1608size
RS1/16S~
CAPACITOR
:2125size
CKSQ**~
:1608size
CCSR**~or
CKSR**~


B 3/4
ADA0A
LRCKA
BCKA
R825 0
R826 0
R827 0
ADA0
LRCK
BCK
B 2/4 SH_5
B 3/4
B 3/4 BY_5
TP855
V+5V
R901 1.8K
(V)
V
Q901
2SA1576A (RS) -TLB
R902 100F
R903 6.8
Buffer
GNDD
(Y)
(C)
(R)
CR/R
TP859
R911 1.8K
Q911
2SA1576A (RS) -TLB
R912 100F
R913 6.8
Buffer
TP860
(G)
Y/G
R914 1.8K
Q912
2SA1576A (RS) -TLB
R915 100F
R916 6.8
Buffer
(B)
Y_OUT
RC_OUT
C_OUT
G_OUT
CMPSV
B_OUT
V_SEL2 R940 0
LFEON
V_SEL1 R942 0
XAMUTE
ADA3
6CHMD
ADA2
XDFSO
ADA1
XDFSCK
ADA0
XCSDF0 R951 22
LRCK
BCK
B 2/4 DACCLK 2-B5
R954 0
TP904
TP905
TP906
TP907
TP908
TP909
TP901
TP902
TP903
TP910
TP911
TP912
TP913
TP914
TP915
TP916
TP917
TP918
TP919
TP920
TP921
TP922
TP923
TP924
TP925
TP926
TP927
GNDD
CN15
VKN1626
① Y
② Cr (R)
③ C
④ Y (G)
⑤ V
⑥ Cb (B)
⑦ GND
⑧ PRG_Y
⑨ GND
⑩ PRG_Cb
⑪ GND
⑫ PRG_Cr
⑬ GND
⑭ P/XI or VSEL2
⑮ LFE_ON
⑯ VSEL1 or DOUT
⑰ XMUTE
⑱ ADATA3
⑲ 6CH/2CH
⑳ ADATA2
㉑ XDFSO
㉒ ADATA1
㉓ XDFSCK
㉔ ADATA0
㉕ XCSDF0
㉖ LRCLK
㉗ GND
㉘ BCK
㉙ MCLK
㉚ GNDA
VIDEO
VIDEO
AUDIO
F CN5203

3.7 TRADEL, SIDEL and HP ASSYS


CN5104
AKP7163
CN5103
AKP7165
B 2/4
CN401
C TRADEL ASSY (AWU7810)
D SIDEL ASSY (AWU7813)
M+6V
SW5V
GND
GNDM
+3. 3V
+12V (M)
+2. 5V
MICON2
MICON1
CTS
LT1
DTR
XDVDRST
RXD
S (FtoM)
TXD
S (MtoF)
AODAI (AC3)
SSCK
SQUEEZ
XRDY
LETTER
CN5101
AKP7167
SSI
SSO
VM+6
VD+5DVD
VD+3DVD
VM+12
V+2R5
C5106 STBY
C5103 0.047
C5108 470p
C5107 470p
C5105 100p
GNDDVD
GNDM
R5101 100
R5105 100
R5102 100
R5103 220
R5104 220
(DI)
DVDM
HP
CN5102
VKN1267
Nc
GNDD
VD+5
GNDDISP
IC8901 LC75366M
L10dBIN
LCT1
LCT2
L10dBOUT
L2dBIN
L2dBOUT
LVref
Vdd
CL
DI
R10dBIN
RCT1
RCT2
R10dBOUT
R2dBIN
R2dBOUT
RVref
Vss
S
CE
BA4558F IC8902
R8910 STBY
R8912 STBY
C8904 10/50
C8906 10/50
R8902 1M
R8903 10k
R8904 10k
C8907 0.01
C8908 470/6.3
(HP)
C8902 10/50
HPR
GNDAHP
HPL
C8901 10/50
R8909 STBY
C8903 10/50
R8901 1M
C8905 10/50
R8911 STBY
R8905 220
R8906 220
R8907 220
R8908 220
C8911 STBY
C8912 STBY
C8913 STBY
GNDA
1HPCLK
2HPDATA
3HPCE
L5087 (R5097) 22μ
VE+56
F5085 (R5095)
F5088 (R5098) 0
F5081 (R5091) 0
F5082 DTF1069
F5083 (R5093) 0
F5084 (R5094) 0
DISP
CN5081
AKP7134
C5081 100/10
C5082 0.1 YF
F5086 STBY (R5096) (0)
D5081
D5082
D5083
D5084
C5083 100p
C5084 100p
C5085 100p
GNDDISP
CHASSIS
(CABLE CONNECTOR)
TO CNB ASSY CN5651 [DISPLAY UNIT]
D5081~D5084 : UDZS8. 2B

CN5591
1. XFLCS
2. GNDDISP
3. FLAC2
4. FLCK
5. SRIN
6. VE+5. 6
7. FLAC1
8. FLDATA
9. VD+5
10. VFDP

NOTES

ALL CAPACITORS ARE IN μF
UNLESS OTHERWISE SPECIFIED
CH : CCSRCH
YB : CKSRYB
(OTHER : CKSRYF)
JQ : CEJQ
(OTHER : CEAT***M##)

ALL RESISTORS ARE IN Ω
1/16W

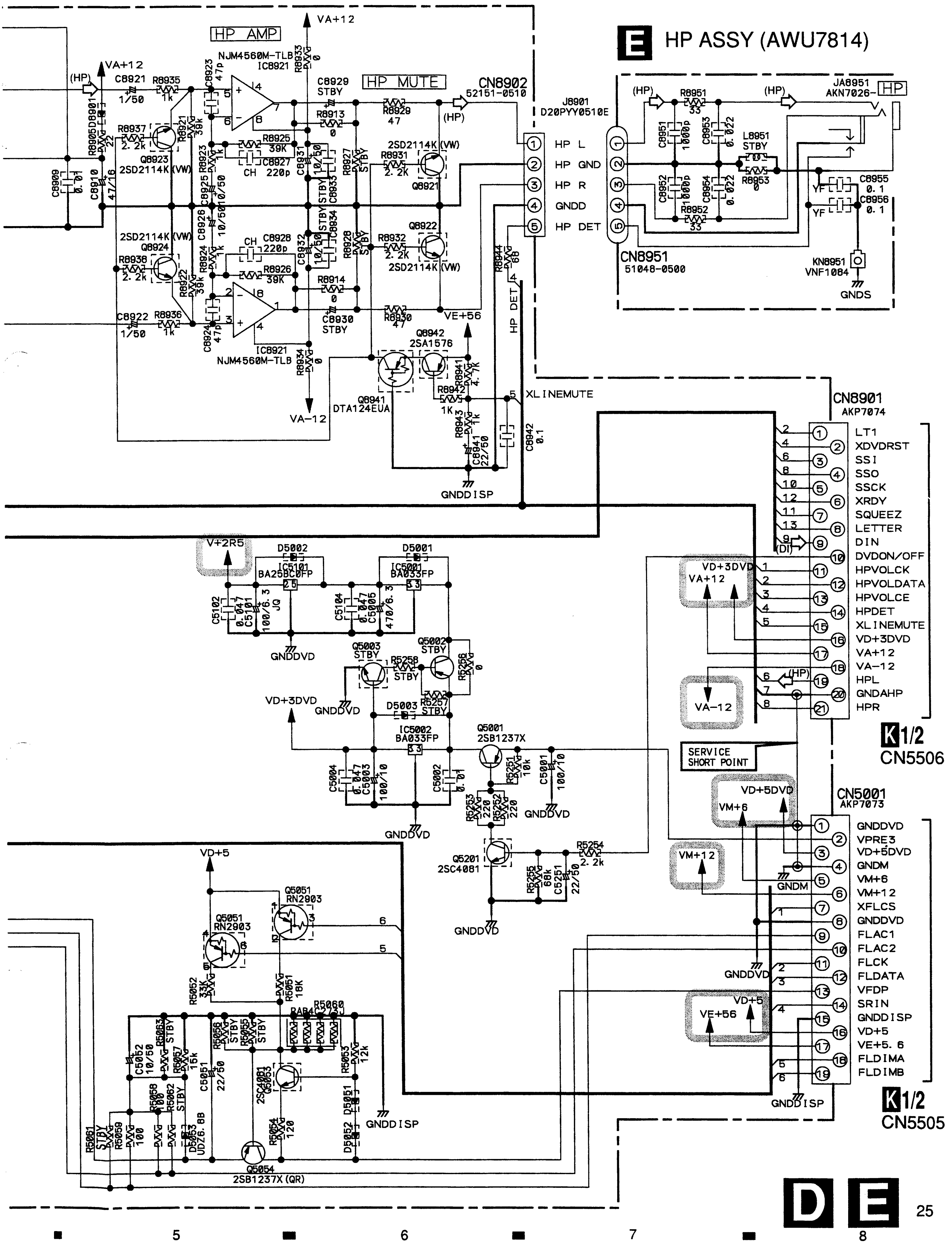
ALL INDUCTORS ARE IN μH
LCYA

NO MARK DIODE
1SS355

(DI) ⇨ : DI AUDIO SIGNAL ROUTE
(HP) ⇨ : HP AUDIO SIGNAL ROUTE

▭ : The power supply is shown with the marked box.

E HP ASSY (AWU7814)

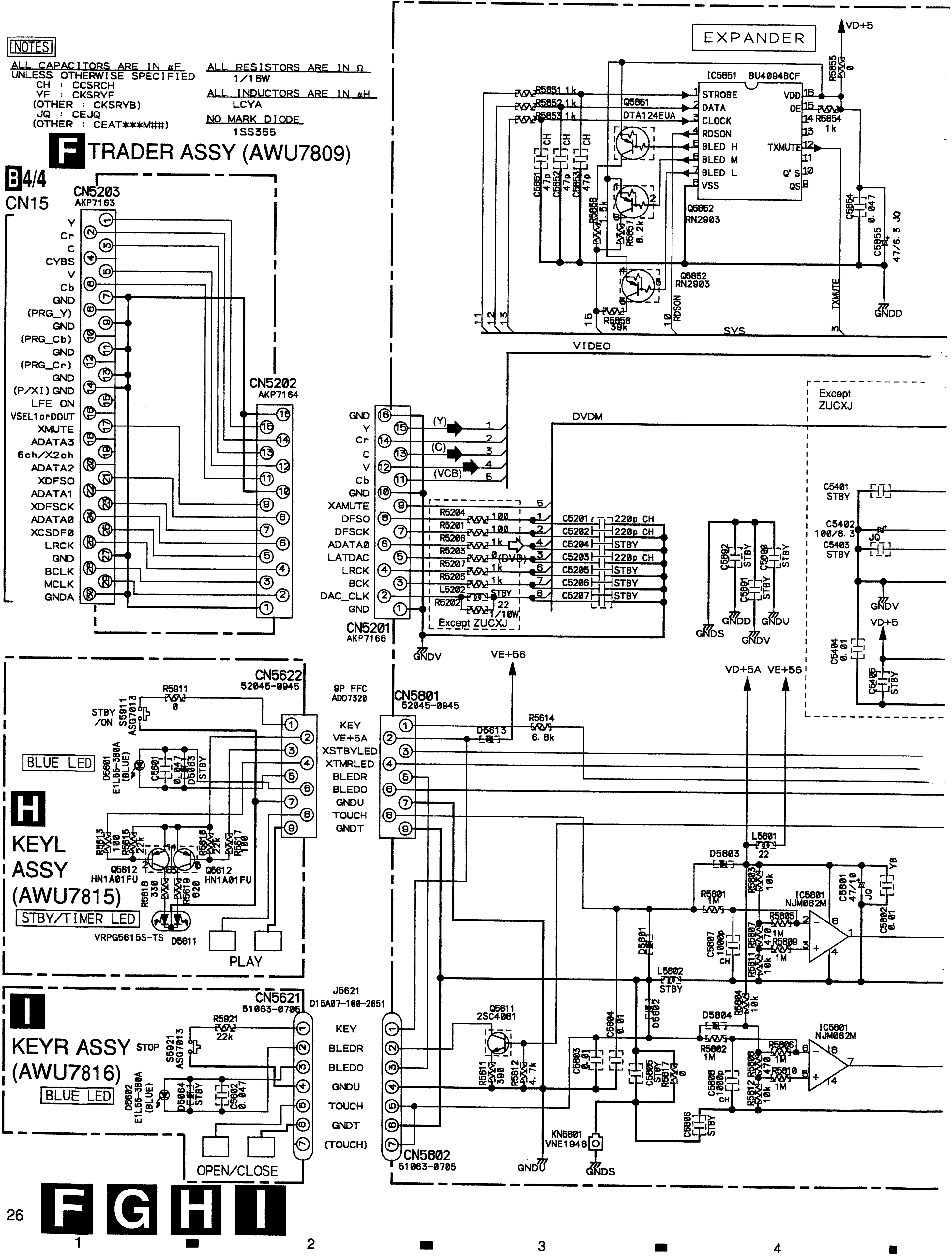

HP AMP
HP MUTE
NJM4560M-TLB
IC8921
VA+12
VA-12
VE+56
(HP)
C8921 1/50
R8935 1k
C8923 47p
R8933 0
C8929 STBY
R8913 0
R8929 47
CN8902 52151-0510
J8901 D20PYY0510E
R8937 2.2k
R8921 39k
Q8923 2SD2114K(VW)
R8923 1k
R8925 39K
C8927 220p
CH
C8931 10/50
R8927 STBY
R8931 2.2k
2SD2114K(VW)
Q8921
C8909 0.01
C8910 47/16
R8905 D8901 22
C8925 10/50
C8926 10/50
C8933 STBY
C8934 STBY
C8932 10/50
R8928 STBY
Q8924
2SD2114K(VW)
R8938 2.2k
R8924 1k
R8922 39k
C8928 220p
R8926 39K
R8914 0
R8932 2.2k
Q8922 2SD2114K(VW)
C8922 1/50
R8936 1k
C8924 47p
C8930 STBY
R8930 47
R8934 0
Q8942 2SA1576
Q8941 DTA124EUA
R8941 4.7K
R8942 1K
R8943 1k
C8941 22/50
C8942 0.1
R8944 68
HP DET
XLINEMUTE
GNDDISP
HP L
HP GND
HP R
GNDD
HP DET
CN8951 51048-0500
R8951 33
C8951 1000p
C8953 0.022
L8951 STBY
R8953 0
C8952 1000p
C8954 0.022
R8952 33
C8955 0.1
C8956 0.1
YF
JA8951 AKN7026-
HP
KN8951 VNF1084
GNDS
CN8901 AKP7074
LT1
XDVDRST
SSI
SSO
SSCK
XRDY
SQUEEZ
LETTER
DIN
DVDON/OFF
HPVOLCK
HPVOLDATA
HPVOLCE
HPDET
XLINEMUTE
VD+3DVD
VA+12
VA-12
HPL
GNDAHP
HPR
(DI)
K 1/2 CN5506
V+2R5
D5002
D5001
IC5101 BA25BC0FP
IC5001 BA033FP
C5102
C5101 0.047 100/6.3 JG
C5104
C5005 0.047 470/6.3
GNDDVD
Q5003 STBY
R5258 STBY
Q5002 STBY
R5256 0
R5257 STBY
D5003 STBY
VD+3DVD
IC5002 BA033FP
Q5001 2SB1237X
R5251 10k
C5001 100/10
C5004
C5003 0.047 100/10
C5002 0.01
R5253 220
R5252 220
SERVICE SHORT POINT
VD+5DVD
VM+6
VM+12
VA-12
VD+5
VE+56
Q5201 2SC4081
R5254 2.2k
R5255 68k
C5251 22/50
CN5001 AKP7073
GNDDVD
VPRE3
VD+5DVD
GNDM
VM+6
VM+12
XFLCS
GNDDVD
FLAC1
FLAC2
FLCK
FLDATA
VFDP
SRIN
GNDDISP
VD+5
VE+5.6
FLDIMA
FLDIMB
K 1/2 CN5505
Q5051 RN2903
R5052 33K
R5051 18K
R5060
RAB4C273J
C5052 10/50
R5063 STBY
R5057 15k
R5056 STBY
R5055 STBY
C5051 22/50
Q5053 2SC4081
R5053 12k
D5051
R5058 100
R5062 STBY
D5053 UDZ6.8B
R5061 STBY
R5059 100
R5054 120
D5052
Q5054 2SB1237X(QR)
GNDDISP

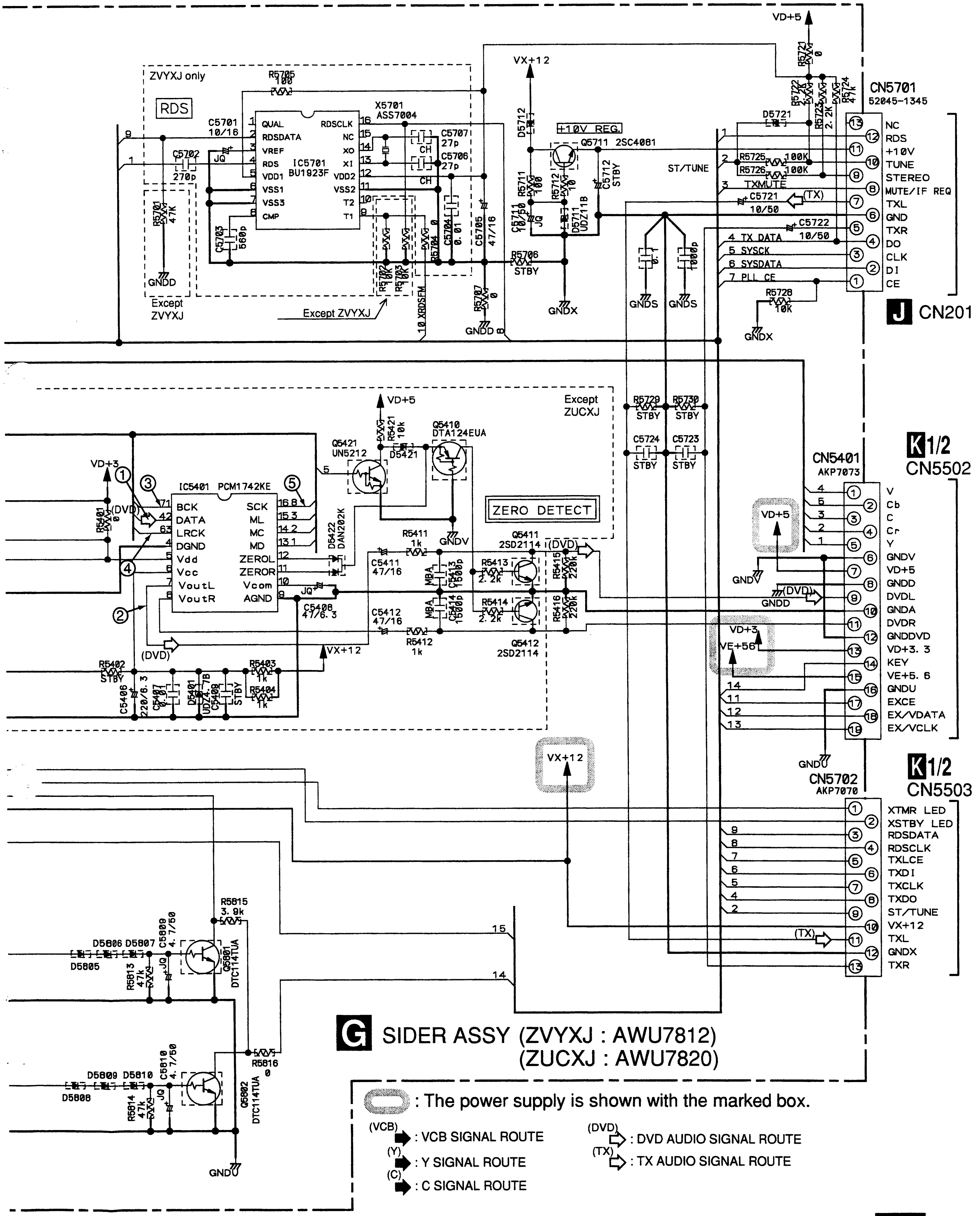
3.8 TRADER, SIDER, KEYL and KEYR ASSYS

NOTES

ALL CAPACITORS ARE IN µF
UNLESS OTHERWISE SPECIFIED
CH : CCSRCH
YF : CKSRYF
(OTHER : CKSRYB)
JQ : CEJQ
(OTHER : CEAT∗∗∗M##)

ALL RESISTORS ARE IN Ω
1/16W
ALL INDUCTORS ARE IN µH
LCYA
NO MARK DIODE
1SS355


F TRADER ASSY (AWU7809)
B 4/4 CN15
CN5203 AKP7163
Y
Cr
C
CYBS
V
Cb
GND
(PRG_Y)
GND
(PRG_Cb)
GND
(PRG_Cr)
GND
(P/XI) GND
LFE ON
VSEL1orDOUT
XMUTE
ADATA3
6ch/X2ch
ADATA2
XDFSO
ADATA1
XDFSCK
ADATA0
XCSDF0
LRCK
GND
BCLK
MCLK
GNDA
CN5202 AKP7164
EXPANDER
VD+5
R5855 0
IC5851 BU4094BCF
STROBE
DATA
CLOCK
RDSON
BLED H
BLED M
BLED L
VSS
VDD
OE
TXMUTE
Q'S
QS
R5851 1k
R5852 1k
R5853 1k
R5854 1k
Q5851 DTA124EUA
Q5852 RN2903
C5851 47p CH
C5852 47p CH
C5853 47p CH
R5856 1.5k
R5857 8.2k
R5858 39k
C5854 0.047
C5856 47/6.3 JQ
GNDD
RDSON
TXMUTE
SYS
VIDEO
DVDM
Except ZUCXJ
GND
Y
Cr
C
V
Cb
GND
XAMUTE
DFSO
DFSCK
ADATA0
LATDAC
LRCK
BCK
DAC_CLK
GND
CN5201 AKP7166
(Y)
(C)
(VCB)
R5204 100
R5201 100
R5206 1k
R5203 0 (DVD)
R5207 1k
R5205 1k
L5202 STBY
R5202 22 1/10W
Except ZUCXJ
C5201 220p CH
C5202 220p CH
C5204 STBY
C5203 220p CH
C5205 STBY
C5206 STBY
C5207 STBY
C5892 STBY
C5891 STBY
C5890 STBY
GNDS
GNDD
GNDU
GNDV
C5401 STBY
C5402 100/6.3 JQ
C5403 STBY
C5404 0.01
C5405 STBY
VD+5
VE+56
VD+5A
CN5622 52045-0945
R5911 0
STBY/ON S5911 ASG7013
BLUE LED
D5601 E1L55-3B0A (BLUE)
C5601 0.047
D5063 STBY
H KEYL ASSY (AWU7815)
STBY/TIMER LED
R5613 100
R5615 22k
R5616 22k
R5617 100
Q5612 HN1A01FU
R5618 330
R5619 820
VRPG5615S-TS D5611
PLAY
9P FFC ADD7320
CN5801 52045-0945
KEY
VE+5A
XSTBYLED
XTMRLED
BLEDR
BLEDO
GNDU
TOUCH
GNDT
D5613
R5614 6.8k
L5801 22
D5803
R5801 1M
R5803 10k
R5805 1M
R5807 470
R5809 1M
R5811 10k
C5807 1000p CH
IC5801 NJM062M
C5801 47/10 JQ
C5802 0.01
YB
D5801
L5802 STBY
D5802
R5804 10k
D5804
R5802 1M
R5806 1M
R5808 470
R5810 1M
R5812 10k
C5808 1000p CH
I KEYR ASSY (AWU7816)
CN5621 51063-0705
R5921 22k
STOP S5921 ASG7013
BLUE LED
D5602 E1L55-3B0A (BLUE)
D5064 STBY
C5602 0.047
OPEN/CLOSE
J5621 D15A07-100-2651
KEY
BLEDR
BLEDO
GNDU
TOUCH
GNDT
(TOUCH)
CN5802 51063-0705
Q5611 2SC4081
R5611 390
R5612 4.7k
C5803 0.01
C5804 0.01
C5805 STBY
R5817 0
C5806 STBY
KN5801 VNE1948
GNDS
GNDV
GND


A
B
C
D
ZVYXJ only
RDS
R5705 100
C5701 10/16
C5702 270p
JQ
IC5701 BU1823F
QUAL
RDSDATA
VREF
RDS
VDD1
VSS1
VSS3
CMP
RDSCLK
NC
XO
XI
VDD2
VSS2
T2
T1
X5701 ASS7004
C5707 27p
C5706 27p
CH
R5701 47K
C5703 560p
GNDD
Except ZVYXJ
R5702 10K
R5703 10K
R5704 0
C5704 0.01
C5705 47/16
R5706 STBY
R5707 0
10 XRDSFM
VX+12
D5712
+10V REG.
Q5711 2SC4081
R5711 100
R5712 10
C5711 10/50
D5711 UDZ11B
C5712 STBY
GNDX
VD+5
R5721 0
R5722 2.2K
R5723 2.2K
R5724 47K
D5721
ST/TUNE
R5725 100K
R5726 100K
TXMUTE
C5721 10/50
(TX)
C5722 10/50
TX DATA
SYSCK
SYSDATA
PLL CE
R5728 10K
0.1
1000p
GNDS
CN5701 52045-1345
NC
RDS
+10V
TUNE
STEREO
MUTE/IF REQ
TXL
GND
TXR
DO
CLK
DI
CE
J CN201
Except ZUCXJ
R5729 STBY
R5730 STBY
C5724 STBY
C5723 STBY
VD+5
Q5421 UN5212
R5421 10k
D5421
Q5410 DTA124EUA
IC5401 PCM1742KE
BCK
DATA
LRCK
DGND
Vdd
Vcc
VoutL
VoutR
SCK
ML
MC
MD
ZEROL
ZEROR
Vcom
AGND
VD+3
R5401 0
(DVD)
D5422 DAN202K
ZERO DETECT
R5411 1k
GNDV
Q5411 2SD2114
C5411 47/16
MBA
C5413 1500p
R5413 2.2k
R5415 220k
C5408 47/6.3
C5412 47/16
C5414 1500p
R5414 2.2k
R5416 220k
R5412 1k
Q5412 2SD2114
VX+12
R5402 STBY
C5406 220/6.3
C5407 0.01
D5401 UDZ4.7B
C5409 STBY
R5403 1k
R5404 1k
CN5401 AKP7073
K 1/2 CN5502
V
Cb
C
Cr
Y
GNDV
VD+5
GNDD
DVDL
GNDA
DVDR
GNDDVD
VD+3.3
KEY
VE+5.6
GNDU
EXCE
EX/VDATA
EX/VCLK
VE+56
GNDU
CN5702 AKP7070
K 1/2 CN5503
XTMR LED
XSTBY LED
RDSDATA
RDSCLK
TXLCE
TXDI
TXCLK
TXDO
ST/TUNE
VX+12
TXL
GNDX
TXR
R5815 3.9k
D5806 D5807
D5805
C5809 4.7/50
R5813 47k
Q5801 DTC114TUA
R5816 0
D5809 D5810
D5808
C5810 4.7/50
R5814 47k
Q5802 DTC114TUA
GNDU

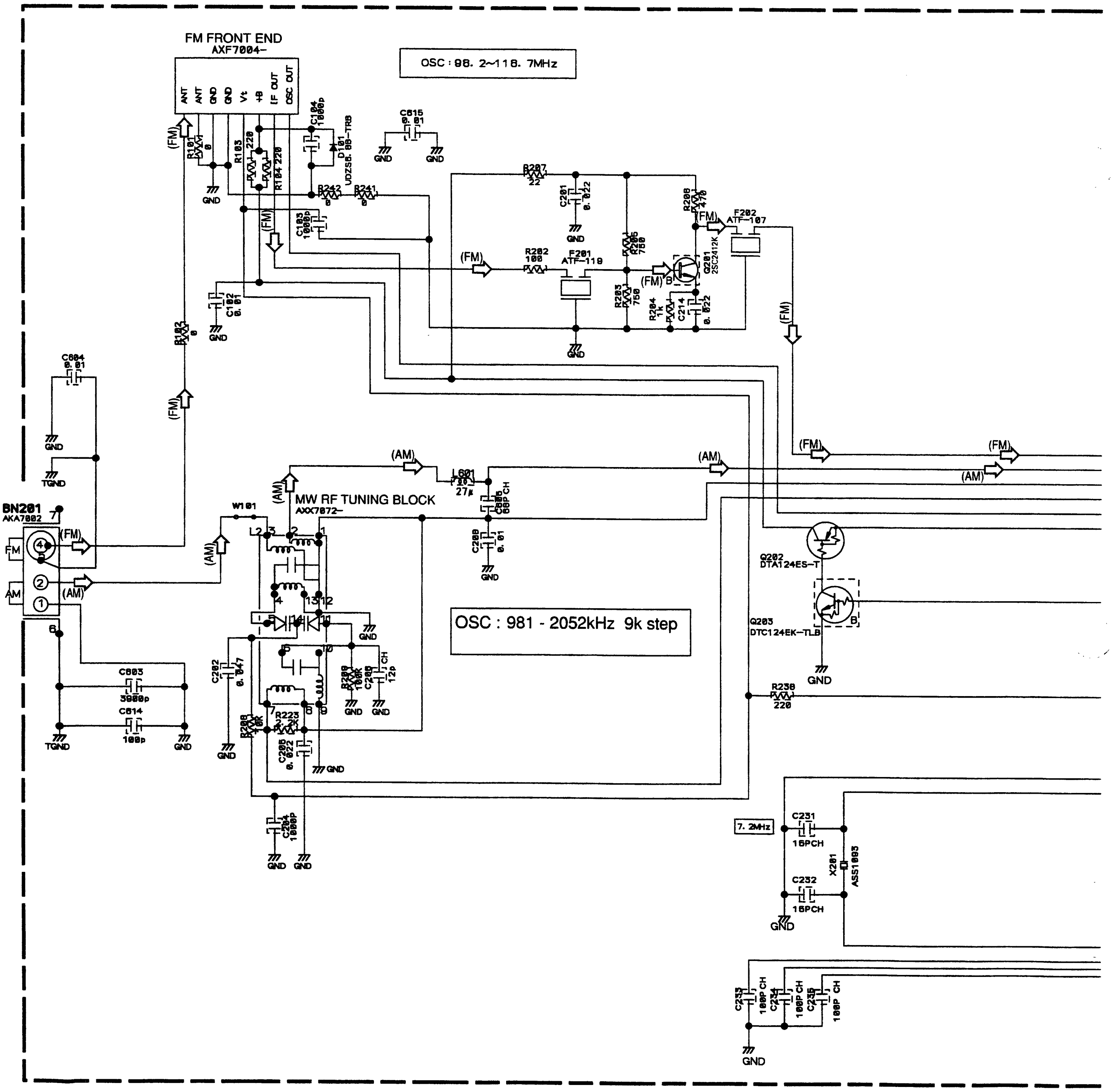
G SIDER ASSY (ZVYXJ : AWU7812)
(ZUCXJ : AWU7820)

▭ : The power supply is shown with the marked box.

(VCB) ➡ : VCB SIGNAL ROUTE
(Y) ➡ : Y SIGNAL ROUTE
(C) ➡ : C SIGNAL ROUTE
(DVD) ⇨ : DVD AUDIO SIGNAL ROUTE
(TX) ⇨ : TX AUDIO SIGNAL ROUTE

3.9 FM/AM TUNER MODULE (ZVYXJ TYPE)

J FM/AM TUNER MODULE (ZVYXJ : AXQ7229)


FM FRONT END
AXF7004-
ANT
ANT
GND
GND
Vt
+B
IF OUT
OSC OUT
OSC : 98. 2~118. 7MHz
C104
1000p
D101
UDZS8. 8B-TRB
C615
0. 01
GND
GND
(FM)
R101
0
R103
220
R104 220
GND
R242
0
R241
0
C103
1000p
(FM)
R207
22
C201
0. 022
GND
R208
470
(FM)
F202
ATF-107
(FM)
R202
100
F201
ATF-119
R206
750
(FM) B
Q201
2SC2412K
R203
750
R204
1k
C214
0. 022
GND
C102
0. 01
GND
R102
0
(FM)
(FM)
C604
0. 01
GND
TGND
BN201
AKA7002
7
FM
4
5
(FM)
AM
2
1
(AM)
6
W101
(AM)
(AM)
MW RF TUNING BLOCK
AXX7072-
L2
3
2
1
4
13
12
5
14
11
6
10
7
8
9
L601
27µ
C606
68P CH
C208
0. 01
GND
(AM)
(FM)
(FM)
(AM)
Q202
DTA124ES-T
Q203
DTC124EK-TLB
B
GND
OSC : 981 - 2052kHz 9k step
C603
3900p
C614
100p
TGND
GND
C202
0. 047
GND
R209
100K
C209
12p
CH
GND
GND
R200
10K
R223
2. 2K
C205
0. 022
GND
C204
1000P
GND
GND
R238
220
7. 2MHz
C231
15PCH
X201
ASS1003
C232
15PCH
GND
C233
100P CH
C234
100P CH
C235
100P CH
GND

Notes

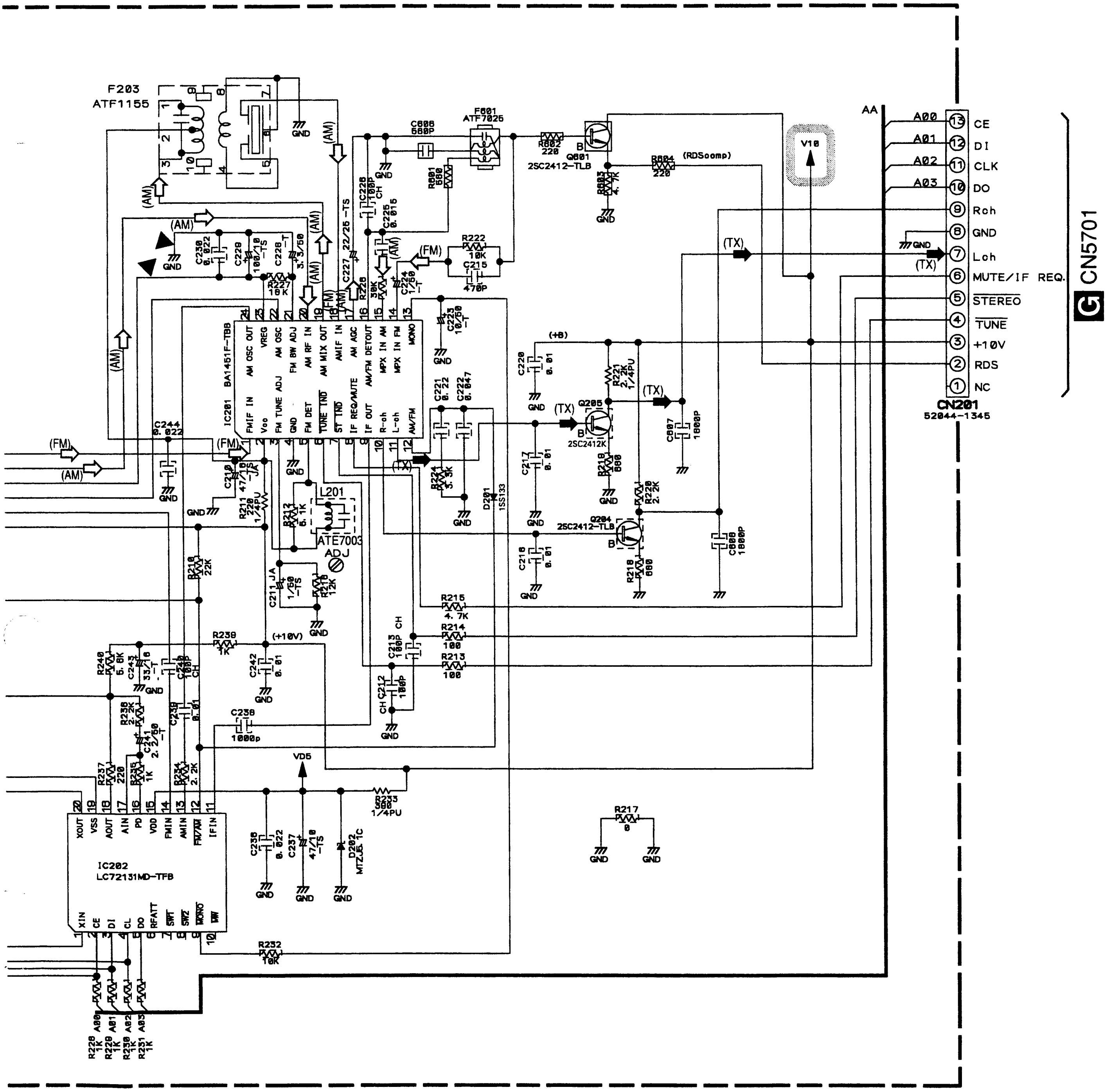
1. RESISTORS
Indicated in Ω, 1/16W±5% Tolerance unless otherwise noted K;kΩ, M;MΩ.
2. CAPACITORS
Indicated in Capacity(µF)/VOLTAGE (V) unless otherwise noted P;PF.
3. DIODES
No mark diode is 1SS133.

▭ : The power supply is shown with the marked box.

(TX) ➡ : AUDIO SIGNAL ROUTE (TUNER)

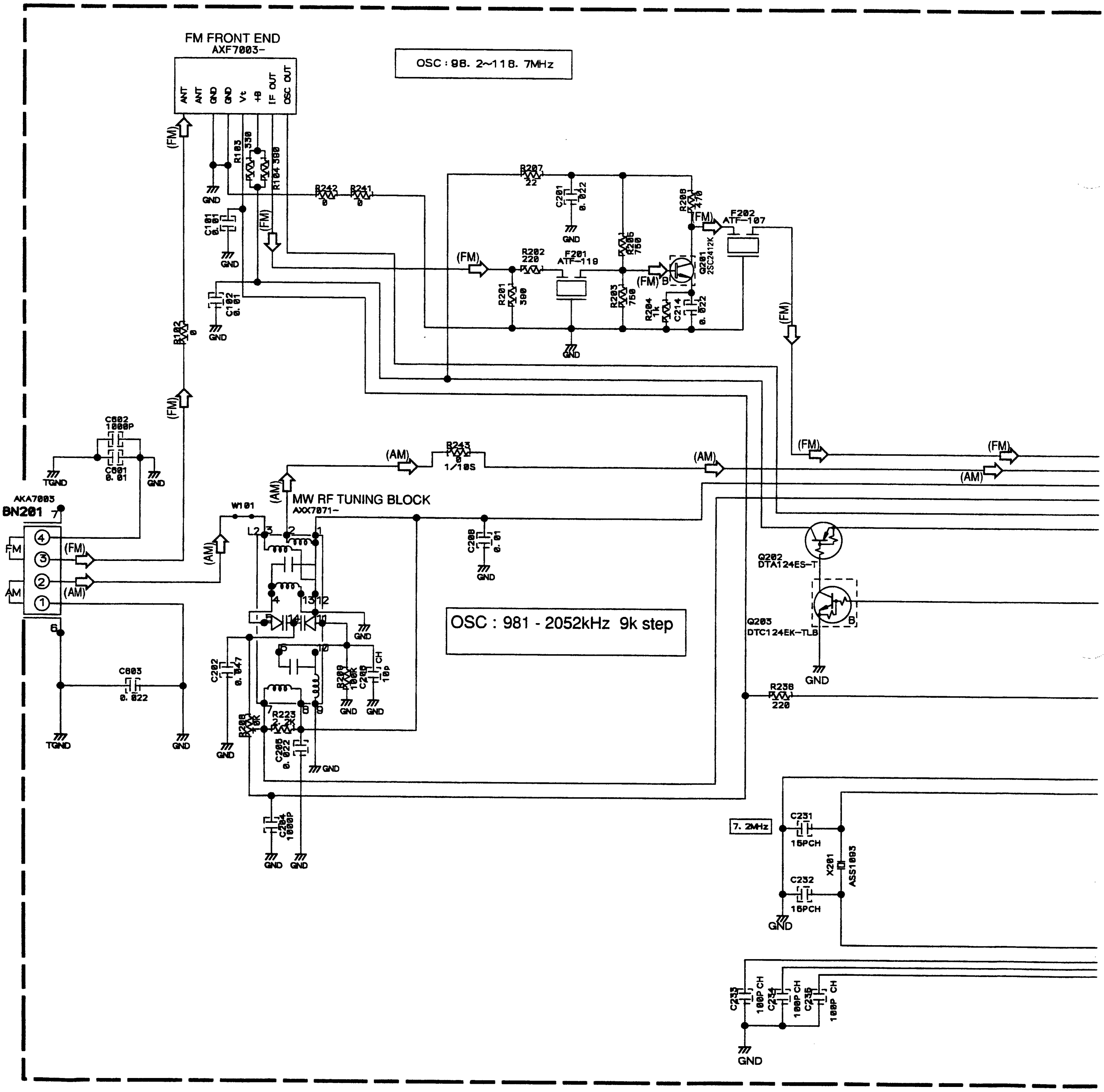
(AM) ⇨ : AM SIGNAL ROUTE

(FM) ⇨ : FM SIGNAL ROUTE


F203
ATF1155
F601
ATF7025
C606 680P
R602 220
Q601
2SC2412-TLB
R603 4.7K
R604 220
(RDSoomp)
R601 680
C226 100P CH
C225 0.015
C227 22/25-TS
R222 10K
C215 470P
R226 30K
C224 1/50-T
C230 0.022
C229 100/10-TS
C228 3.3/50-T
R227 10K
IC201 BA1451F-TBB
AM OSC OUT
VREG
AM OSC
FM BW ADJ
AM RF IN
AM MIX OUT
AMIF IN
AM AGC
AM/FM DETOUT
MPX IN AM
MPX IN FM
MONO
FMIF IN
Vcc
FM TUNE ADJ
GND
FM DET
TUNE IND
ST IND
IF REQ/MUTE
IF OUT
R-ch
L-ch
AM/FM
C223 10/50-T
C221 0.22
C222 0.047
C244 0.022
C210 47/16-JA
R211 220 1/4PU
R212 5.1K
L201
ATE7003
ADJ
R224 3.3K
D201 1SS133
C220 0.01
(+8)
R221 2.2K 1/4PU
Q205 2SC2412K
R219 680
C207 1000P
C217 0.01
Q204 2SC2412-TLB
R220 2.2K
C208 1000P
C216 0.01
R218 680
R210 22K
C211 1/50-TS JA
R216 12K
R215 4.7K
R214 100
R213 100
C213 100P CH
C212 100P CH
R239 1K
(+10V)
C242 0.01
R240 5.6K
C243 33/16-T
C240 100P CH
R238 2.2K
C239 0.01
C241 2.2/50-T
C238 1000p
R237 220
R235 1K
R234 2.2K
VD5
R233 560 1/4PU
C235 0.022
C237 47/16-TS
D202 MTZJ6.1C
R217 0
IC202
LC72131MD-TFB
XOUT VSS AOUT AIN PD VDD FMIN AMIN FM/AM IFIN
XIN CE DI CL DO RFATT SW1 SW2 MONO SW
R232 10K
R228 1K A00
R229 1K A01
R230 1K A02
R231 1K A03
AA
V10
A00 A01 A02 A03
CN201
52044-1345
⑬ CE
⑫ DI
⑪ CLK
⑩ DO
⑨ Rch
⑧ GND
⑦ Lch
⑥ MUTE/IF REQ.
⑤ STEREO
④ TUNE
③ +10V
② RDS
① NC
G CN5701
(TX)
(AM)
(FM)
GND

3.10 FM/AM TUNER MODULE (ZUCXJ TYPE)

J FM/AM TUNER MODULE (ZUCXJ : AXQ7228)


FM FRONT END
AXF7003-
ANT
ANT
GND
GND
Vt
+B
IF OUT
OSC OUT
OSC : 98. 2~118. 7MHz
(FM)
R103 330
R104 390
GND
C101 0.01
C102 0.01
R102 0
R242 0
R241 0
R207 22
C201 0.022
GND
R208 470
F202 ATF-107
(FM)
R202 220
F201 ATF-119
R206 750
Q201 2SC2412K
(FM) B
R201 390
R203 750
R204 1k
C214 0.022
C602 1000P
C601 0.01
TGND
GND
AKA7003
BN201
FM
AM
(FM)
(AM)
6
C603 0.022
TGND
GND
(AM)
R243 0 1/10S
(AM)
(FM)
(FM)
(AM)
W101
MW RF TUNING BLOCK
AXX7071-
L2
C208 0.01
GND
Q202 DTA124ES-T
Q203 DTC124EK-TLB
B
OSC : 981 - 2052kHz 9k step
GND
C202 0.047
R209 100K
C206 10p CH
GND
R205 10K
R223 2K
C205 0.022
GND
R238 220
C204 1000P
GND GND
7.2MHz
C231 15PCH
X201 ASS1093
C232 15PCH
GND
C233 100P CH
C234 100P CH
C235 100P CH
GND

Notes

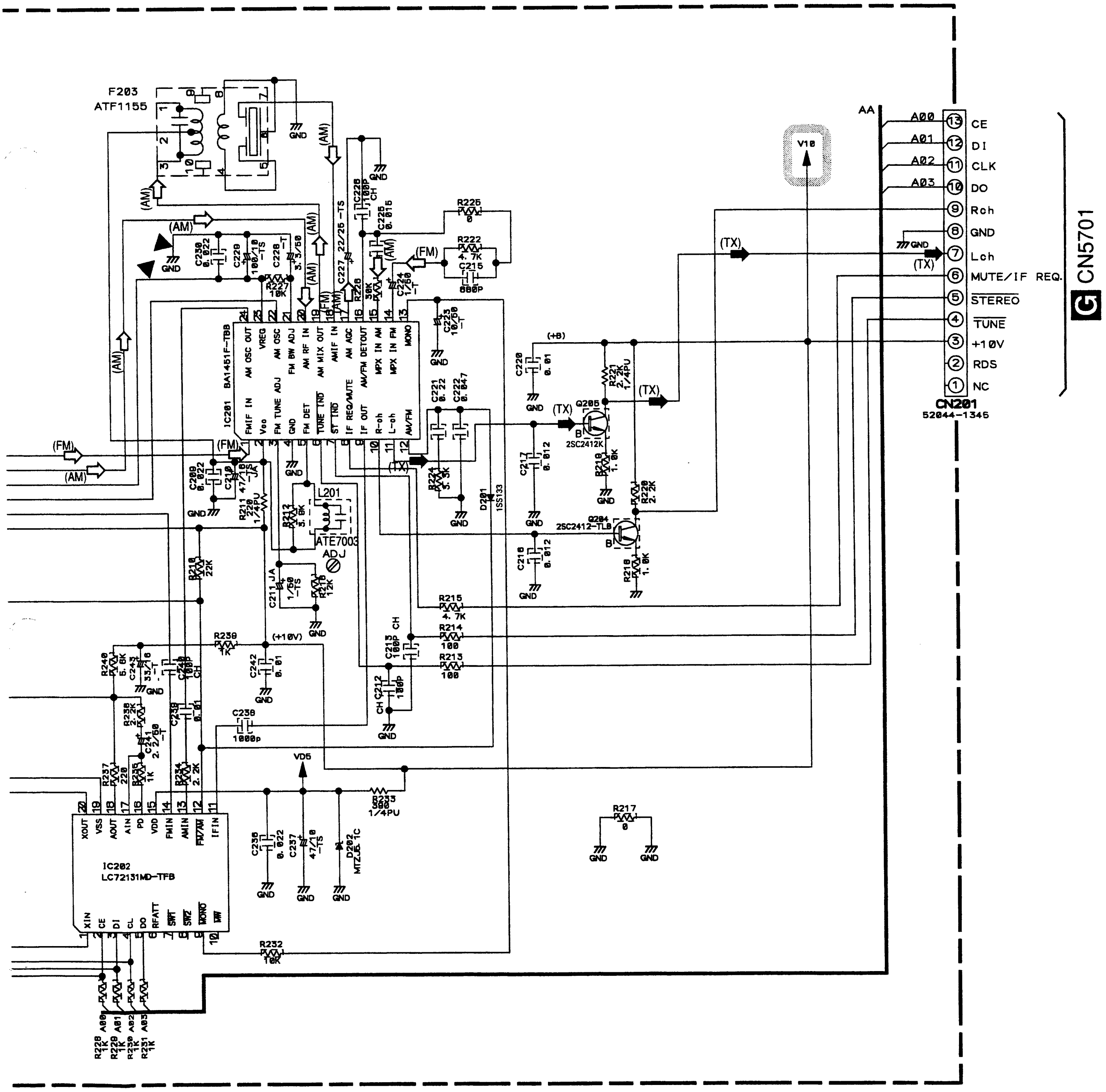
1. RESISTORS
   Indicated in Ω, 1/16W±5% Tolerance unless otherwise noted K;KΩ, M;MΩ.
2. CAPACITORS
   Indicated in Capacity(μF)/VOLTAGE(V) unless otherwise noted P;PF.
3. DIODES
   No mark diode is 1SS133.

▭ : The power supply is shown with the marked box.

(TX) ➡ : AUDIO SIGNAL ROUTE (TUNER)

(AM) ⇨ : AM SIGNAL ROUTE

(FM) ⇨ : FM SIGNAL ROUTE


F203
ATF1155
GND
(AM)
(FM)
(TX)
AA
V10
A00
A01
A02
A03
⑬ CE
⑫ DI
⑪ CLK
⑩ DO
⑨ Rch
⑧ GND
⑦ Lch
⑥ MUTE/IF REQ.
⑤ STEREO
④ TUNE
③ +10V
② RDS
① NC
CN201
52044-1345
G CN5701
IC201 BA1451F-TBB
FMIF IN
Vcc
FM TUNE ADJ
GND
FM DET
TUNE IND
ST IND
IF REQ/MUTE
IF OUT
R-ch
L-ch
AM/FM
AM OSC OUT
VREG
AM OSC
FM BW ADJ
AM RF IN
AM MIX OUT
AMIF IN
AM AGC
AM/FM DETOUT
MPX IN AM
MPX IN FM
MONO
R225 0
R222 4.7K
C215 680P
C226 100P CH
C225 0.015
C227 22/25-TS
R226 30K
C224 1/50 -T
C223 10/50 -T
C230 0.022
C229 100/10 -TS
C228 3.3/50 -T
R227 10K
C221 0.22
C222 0.047
C220 0.01
(+8)
R221 2.2K 1/4PU
Q205 2SC2412K
C217 0.012
R219 1.0K
R220 2.2K
Q204 2SC2412-TLB
C218 0.012
R218 1.0K
D201 1SS133
R224 3.3K
C209 0.022
C210 47/10 -TS
R211 220 1/4PU
R212 5.6K
L201
ATE7003
ADJ
C211 1/50 -TS JA
R213 12K
R216 22K
R215 4.7K
R214 100
R213 100
C213 100P CH
C212 100P CH
R239 1K
(+10V)
C242 0.01
R240 5.6K
C243 33/16 -T
C240 100P CH
R238 2.2K
C239 0.01
C241 2.2/50 -T
C238 1000p
R237 220
R235 1K
R234 2.2K
VD5
R233 390 1/4PU
C235 0.022
C237 47/10 -TS
D202 MTZJ6.1C
R217 0
IC202 LC72131MD-TFB
XOUT VSS AOUT AIN PD VDD FMIN AMIN FM/AM IFIN
XIN CE DI CL DO RFATT SW1 SW2 MONO MW
R232 10K
R228 A00 1K
R229 A01 1K
R230 A02 1K
R231 A03 1K

3.11 MOTHER ASSY (1/2)

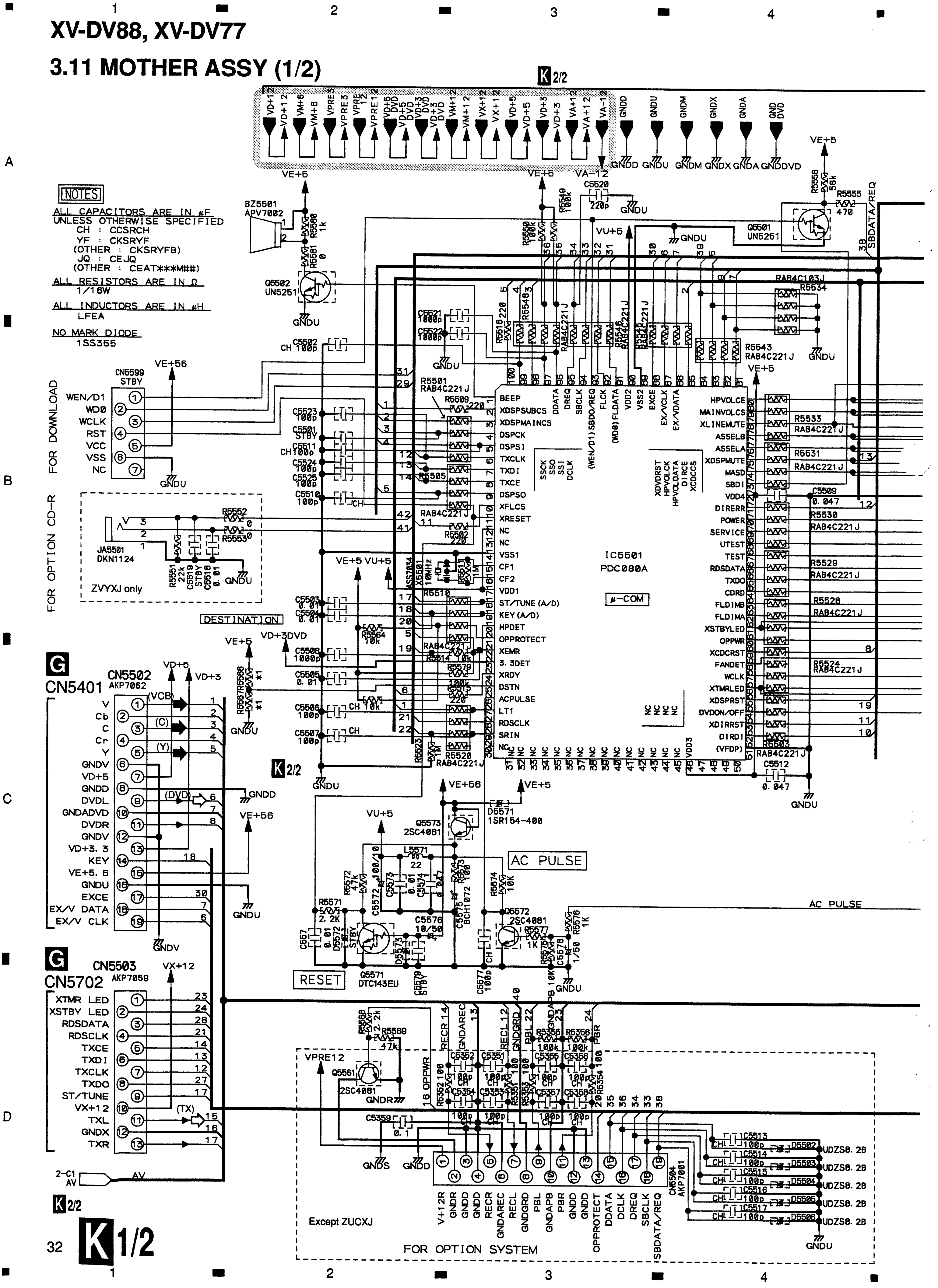
NOTES

ALL CAPACITORS ARE IN µF UNLESS OTHERWISE SPECIFIED
CH : CCSRCH
YF : CKSRYF
(OTHER : CKSRYFB)
JQ : CEJQ
(OTHER : CEAT***M##)

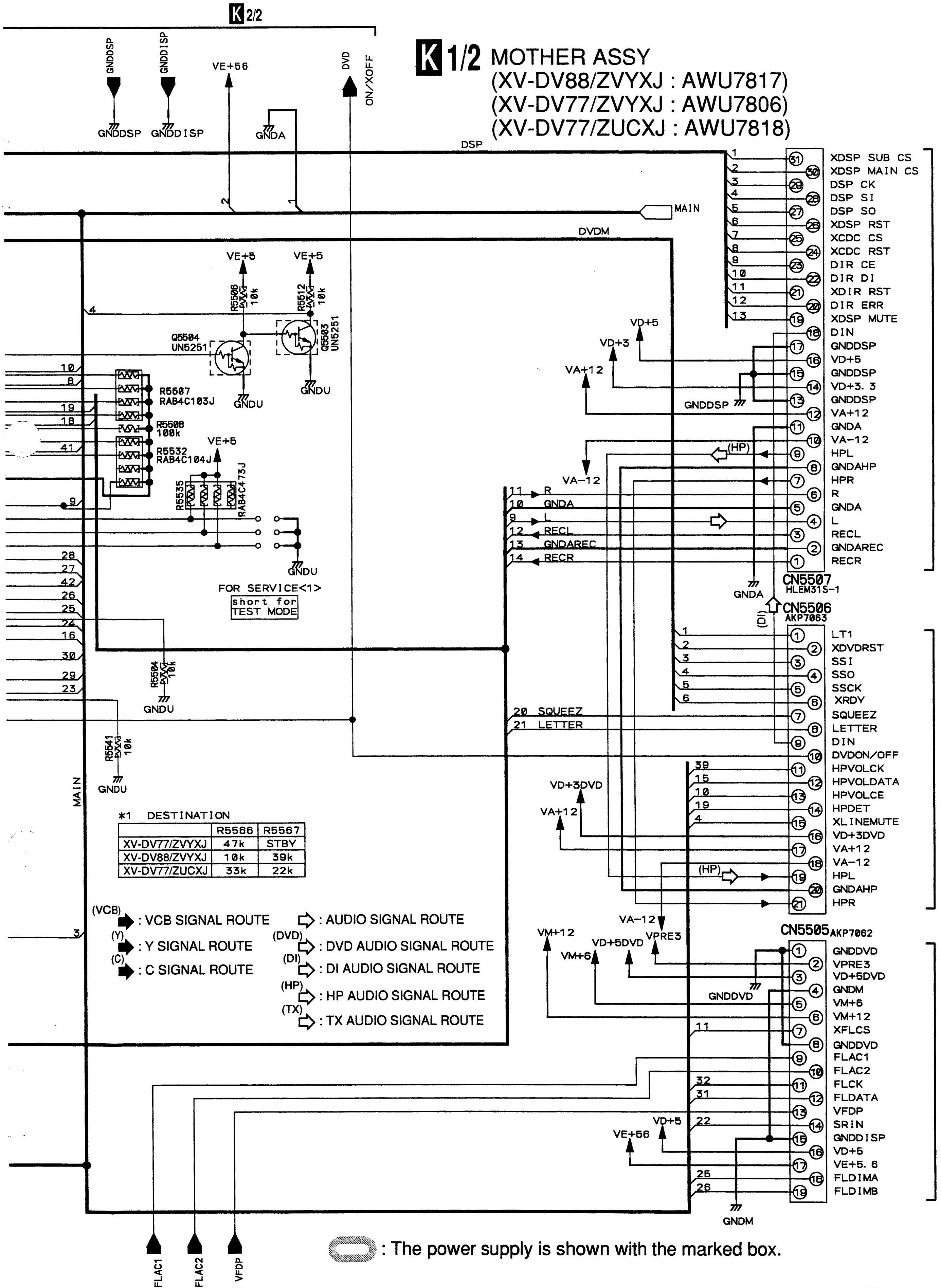
ALL RESISTORS ARE IN Ω
1/16W

ALL INDUCTORS ARE IN µH
LFEA

NO MARK DIODE
1SS355


1
2
3
4
A
B
C
D
K 2/2
VD+12
VM+6
VM+8
VPRE3
VPRE12
VD+5 DVD
VD+3 DVD
VM+12
VX+12
VD+5
VD+3
VA+12
VA-12
GNDD
GNDU
GNDM
GNDX
GNDA
GNDDVD
VE+5
VU+5
VE+56
BZ5501
APV7002
R5560 1k
R5561 0
Q5502
UN5251
Q5501
UN5251
R5556 56k
R5555 470
SBDATA/REQ
C5520 220p
R5550 100k
R5549 100k
RAB4C103J
R5534
R5543
RAB4C221J
CN5599
STBY
FOR DOWNLOAD
WEN/D1
WD0
WCLK
RST
VCC
VSS
NC
FOR OPTION CD-R
JA5501
DKN1124
R5552
R5553
R5551 22k
C5519 STBY
C5518 0.01
ZVYXJ only
DESTINATION
IC5501
PDC080A
µ-COM
BEEP
XDSPSUBCS
XDSPMAINCS
DSPCK
DSPSI
TXCLK
TXDI
TXCE
DSPSO
XFLCS
XRESET
NC
VSS1
CF1
CF2
VDD1
ST/TUNE (A/D)
KEY (A/D)
HPDET
OPPROTECT
XEMR
3.3DET
XRDY
DSTN
ACPULSE
LT1
RDSCLK
SRIN
HPVOLCE
MAINVOLCS
XLINEMUTE
ASSELB
ASSELA
XDSPMUTE
MASD
SBDI
VDD4
DIRERR
POWER
SERVICE
UTEST
TEST
RDSDATA
TXDO
CDRD
FLDIMB
FLDIMA
XSTBYLED
OPPWR
XCDCRST
FANDET
WCLK
XTMRLED
XDSPRST
DVDON/OFF
XDIRRST
DIRDI
(VFDP)
DDATA
DREQ
SBCLK
SBDO/REQ
FLCK
FLDATA
VDD2
VSS2
EXCE
EX/VCLK
EX/VDATA
SSCK
SSO
SSI
DCLK
XDVDRST
HPVOLCK
HPVOLDATA
DIRCE
XCDCCS
VDD3
X5501 10MHz
VSS7034
R5510
R5564 10k
R5514 10k
R5579 100k
R5523 1M
R5520
RAB4C221J
C5509 0.047
C5512 0.047
R5533
R5531
R5530
R5529
R5528
R5524
R5503
G
CN5401
CN5502
AKP7062
V
Cb
C
Cr
Y
GNDV
VD+5
GNDD
DVDL
GNDADVD
DVDR
GNDV
VD+3.3
KEY
VE+5.6
GNDU
EXCE
EX/V DATA
EX/V CLK
(VCB)
(C)
(Y)
(DVD)
VD+3DVD
R5567
R5566
CN5702
CN5503
AKP7059
VX+12
XTMR LED
XSTBY LED
RDSDATA
RDSCLK
TXCE
TXDI
TXCLK
TXDO
ST/TUNE
VX+12
TXL
GNDX
TXR
(TX)
2-C1
AV
Q5573
2SC4081
D5571
1SR154-400
AC PULSE
L5571 22
R5572 47k
C5572 100/10
R5571 2.2K
C5576 10/50
Q5572
2SC4081
R5574 10K
R5577 1K
R5576 1K
C5578 1/50
C5577 100p
Q5571
DTC143EU
RESET
VPRE12
Q5561
2SC4081
R5568 2.2k
R5569 47k
C5359 0.1
GNDS
GNDR
RECR
GNDAREC
RECL
GNDGRD
PBL
GNDAPB
PBR
OPPWR
CN5504
AKP7001
V+12R
GNDR
GNDD
GNDAREC
RECL
GNDGRD
PBL
GNDAPB
PBR
GNDD
GNDD
OPPROTECT
DDATA
DCLK
DREQ
SBCLK
SBDATA/REQ
C5513
C5514
C5515
C5516
C5517
D5502
D5503
D5504
D5505
D5506
UDZS8.2B
Except ZUCXJ
FOR OPTION SYSTEM

K 1/2



K 1/2 MOTHER ASSY
(XV-DV88/ZVYXJ : AWU7817)
(XV-DV77/ZVYXJ : AWU7806)
(XV-DV77/ZUCXJ : AWU7818)

*1 DESTINATION

	R5566	R5567
XV-DV77/ZVYXJ	47k	STBY
XV-DV88/ZVYXJ	10k	39k
XV-DV77/ZUCXJ	33k	22k

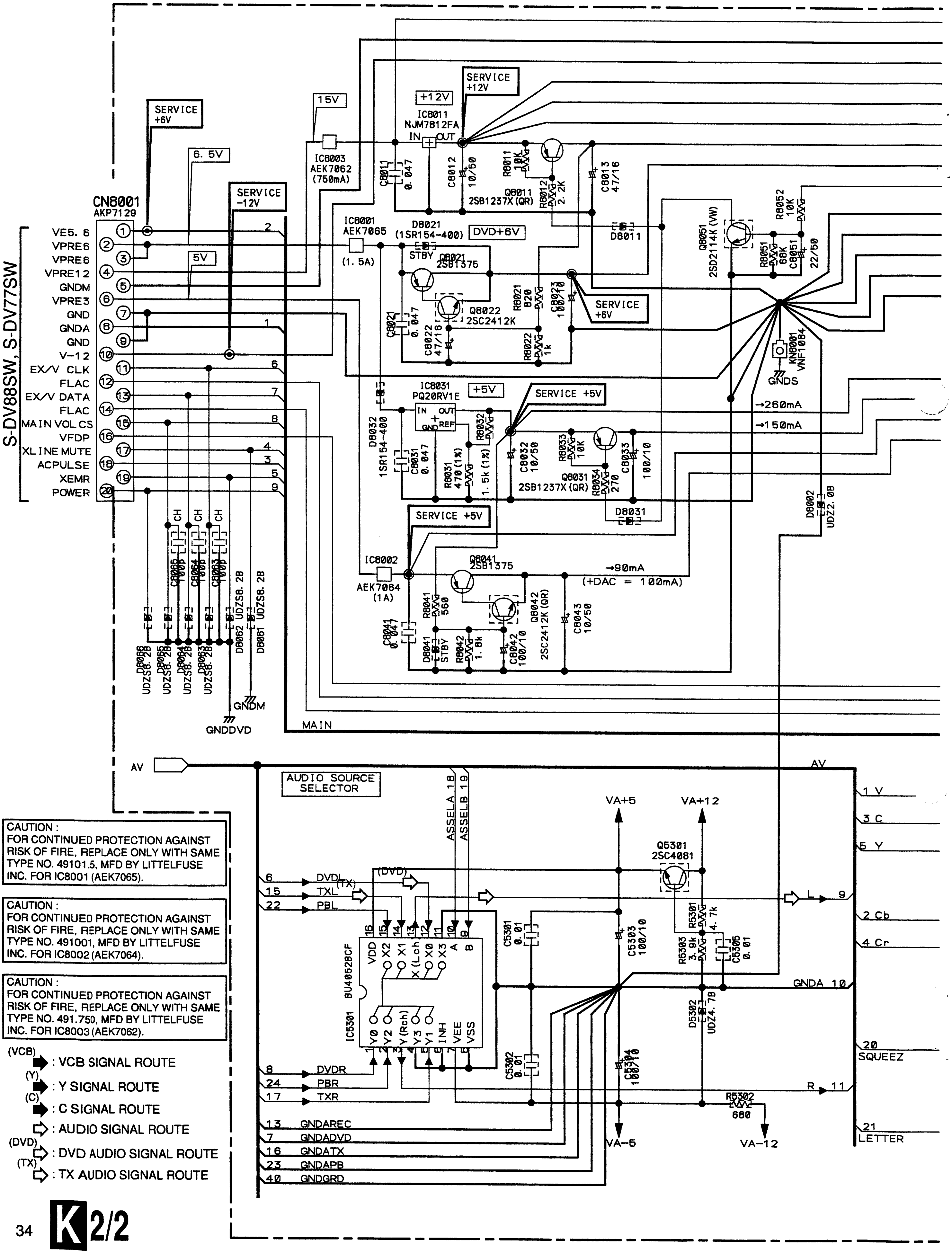
(VCB) ➡ : VCB SIGNAL ROUTE
(Y) ➡ : Y SIGNAL ROUTE
(C) ➡ : C SIGNAL ROUTE
⇨ : AUDIO SIGNAL ROUTE
(DVD) ⇨ : DVD AUDIO SIGNAL ROUTE
(DI) ⇨ : DI AUDIO SIGNAL ROUTE
(HP) ⇨ : HP AUDIO SIGNAL ROUTE
(TX) ⇨ : TX AUDIO SIGNAL ROUTE

▭ : The power supply is shown with the marked box.

K 2/2
GNDDSP
GNDDISP
VE+56
DVD
ON/XOFF
GNDA
DSP
MAIN
DVDM
VE+5
R5506 10k
R5512 10k
Q5504 UN5251
Q5503 UN5251
GNDU
R5507 RAB4C103J
R5508 100k
R5532 RAB4C104J
R5535 RAB4C473J
FOR SERVICE<1>
short for TEST MODE
R5504 10k
R5541 10k
VD+5
VD+3
VA+12
VA-12
GNDDSP
(HP)
R
GNDA
L
RECL
GNDAREC
RECR
SQUEEZ
LETTER
VD+3DVD
VM+12
VM+6
VD+5DVD
VPRE3
GNDDVD
GNDM
CN5507 HLEM31S-1
CN5506 AKP7063
CN5505 AKP7062
(DI)
XDSP SUB CS
XDSP MAIN CS
DSP CK
DSP SI
DSP SO
XDSP RST
XCDC CS
XCDC RST
DIR CE
DIR DI
XDIR RST
DIR ERR
XDSP MUTE
DIN
GNDDSP
VD+5
GNDDSP
VD+3. 3
GNDDSP
VA+12
GNDA
VA-12
HPL
GNDAHP
HPR
R
GNDA
L
RECL
GNDAREC
RECR
L 1/2 CN8101
LT1
XDVDRST
SSI
SSO
SSCK
XRDY
SQUEEZ
LETTER
DIN
DVDON/OFF
HPVOLCK
HPVOLDATA
HPVOLCE
HPDET
XLINEMUTE
VD+3DVD
VA+12
VA-12
HPL
GNDAHP
HPR
D CN8901
GNDDVD
VPRE3
VD+5DVD
GNDM
VM+6
VM+12
XFLCS
GNDDVD
FLAC1
FLAC2
FLCK
FLDATA
VFDP
SRIN
GNDDISP
VD+5
VE+5. 6
FLDIMA
FLDIMB
D CN5001
FLAC1
FLAC2
VFDP
MAIN

XV-DV88, XV-DV77

3.12 MOTHER ASSY (2/2)


A
B
C
D
SERVICE +6V
6. 5V
SERVICE -12V
5V
15V
+12V
SERVICE +12V
IC8011 NJM7812FA
IN OUT
IC8003 AEK7062 (750mA)
C8011 0.047
C8012 10/50
R8011 10K
Q8011 2SB1237X(QR)
R8012 2.2K
C8013 47/16
CN8001 AKP7129
S-DV88SW, S-DV77SW
VE5.6 ①
VPRE6 ②
VPRE6 ③
VPRE12 ④
GNDM ⑤
VPRE3 ⑥
GND ⑦
GNDA ⑧
GND ⑨
V-12 ⑩
EX/V CLK ⑪
FLAC ⑫
EX/V DATA ⑬
FLAC ⑭
MAIN VOL CS ⑮
VFDP ⑯
XLINE MUTE ⑰
ACPULSE ⑱
XEMR ⑲
POWER ⑳
IC8001 AEK7065 (1.5A)
D8021 (1SR154-400)
DVD+6V
STBY
Q8021 2SB1375
Q8022 2SC2412K
C8021 0.047
C8022 47/16
R8021 820
C8023 100/10
R8022 1k
SERVICE +6V
D8011
Q8051 2SD2114K(VW)
R8052 10K
R8051 68K
C8051 22/50
KN8001 VNF1084
GNDS
IC8031 PQ20RV1E
IN OUT GND REF
+5V
SERVICE +5V
D8032 1SR154-400
C8031 0.047
R8031 470(1%)
R8032 1.5k(1%)
C8032 10/50
R8033 10K
Q8031 2SB1237X(QR)
R8034 270
C8033 100/10
D8031
→260mA
→150mA
D8002 UDZ2.0B
SERVICE +5V
IC8002 AEK7064 (1A)
Q8041 2SB1375
R8041 560
Q8042 2SC2412K(QR)
C8043 10/50
→90mA
(+DAC = 100mA)
C8041 0.047
D8041 STBY
R8042 1.8k
C8042 100/10
C8065 100p CH
C8064 100p CH
C8063 100p CH
D8066 UDZS8.2B
D8065 UDZS8.2B
D8064 UDZS8.2B
D8063 UDZS8.2B
D8062 UDZS8.2B
D8061 UDZS8.2B
GNDM
GNDDVD
MAIN
AV
AV
AUDIO SOURCE SELECTOR
ASSELA 18
ASSELB 19
VA+5
VA+12
Q5301 2SC4081
1 V
3 C
5 Y
6 DVDL
15 TXL
22 PBL
(DVD)
(TX)
L 9
2 Cb
4 Cr
IC5301 BU4052BCF
VDD X2 X1 X(Lch) X0 X3 A B
Y0 Y2 Y(Rch) Y3 Y1 INH VEE VSS
C5301 0.01
C5303 100/10
R5303 3.9k
R5301 4.7k
C5305 0.01
GNDA 10
D5302 UDZ4.7B
C5302 0.01
C5304 100/10
20 SQUEEZ
8 DVDR
24 PBR
17 TXR
R 11
R5302 680
13 GNDAREC
7 GNDADVD
16 GNDATX
23 GNDAPB
40 GNDGRD
VA-5
VA-12
21 LETTER

CAUTION :
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE NO. 49101.5, MFD BY LITTELFUSE INC. FOR IC8001 (AEK7065).

CAUTION :
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE NO. 491001, MFD BY LITTELFUSE INC. FOR IC8002 (AEK7064).

CAUTION :
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE NO. 491.750, MFD BY LITTELFUSE INC. FOR IC8003 (AEK7062).

- (VCB) ➡ : VCB SIGNAL ROUTE
- (Y) ➡ : Y SIGNAL ROUTE
- (C) ➡ : C SIGNAL ROUTE
- ⇨ : AUDIO SIGNAL ROUTE
- (DVD) ⇨ : DVD AUDIO SIGNAL ROUTE
- (TX) ⇨ : TX AUDIO SIGNAL ROUTE

K 2/2

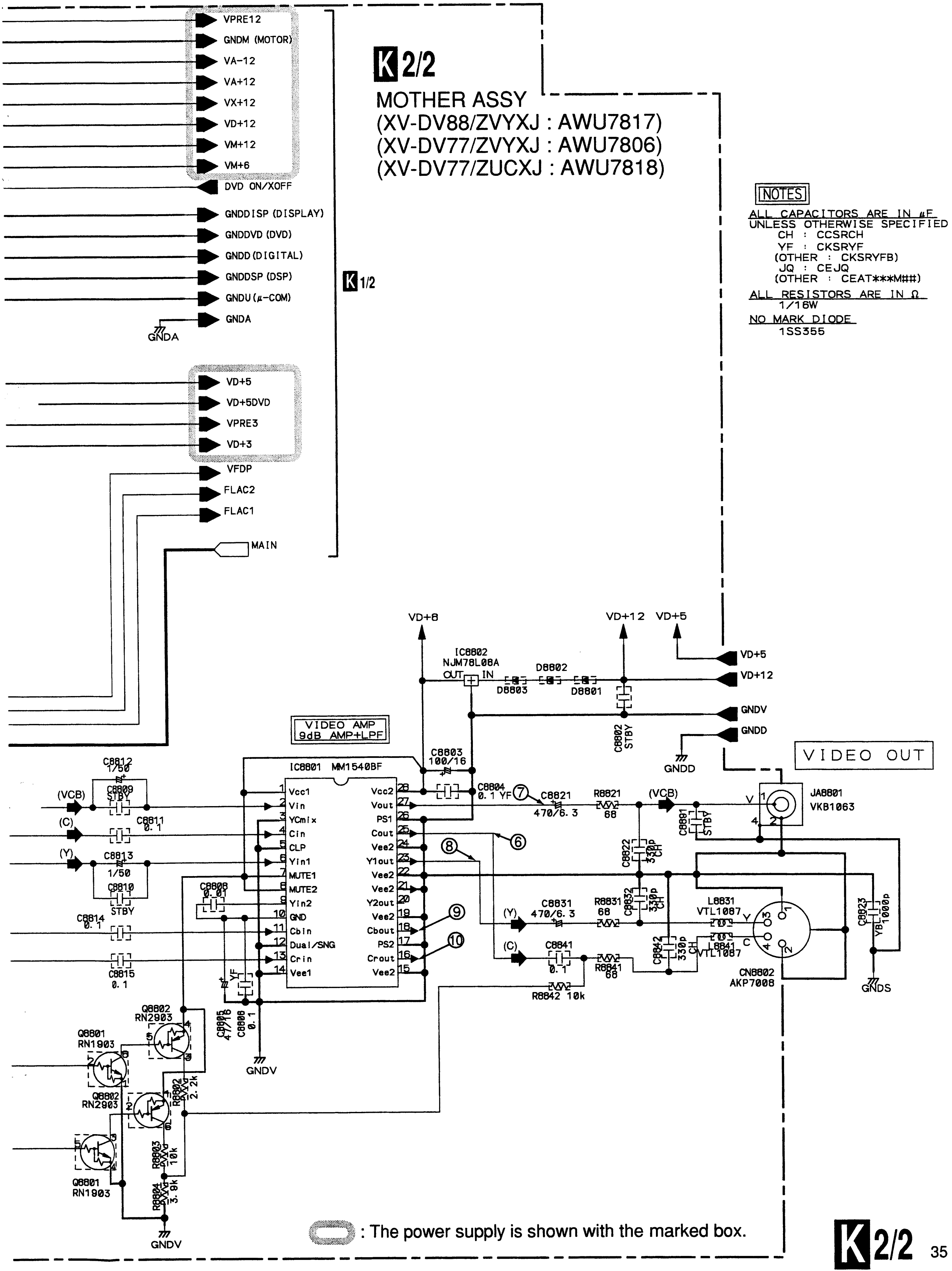
MOTHER ASSY
(XV-DV88/ZVYXJ : AWU7817)
(XV-DV77/ZVYXJ : AWU7806)
(XV-DV77/ZUCXJ : AWU7818)

NOTES

ALL CAPACITORS ARE IN µF
UNLESS OTHERWISE SPECIFIED
CH : CCSRCH
YF : CKSRYF
(OTHER : CKSRYFB)
JQ : CEJQ
(OTHER : CEAT✻✻✻M##)

ALL RESISTORS ARE IN Ω
1/16W

NO MARK DIODE
1SS355


VPRE12
GNDM (MOTOR)
VA-12
VA+12
VX+12
VD+12
VM+12
VM+6
DVD ON/XOFF
GNDDISP (DISPLAY)
GNDDVD (DVD)
GNDD (DIGITAL)
GNDDSP (DSP)
GNDU (µ-COM)
GNDA
GNDA
K 1/2
VD+5
VD+5DVD
VPRE3
VD+3
VFDP
FLAC2
FLAC1
MAIN
VD+8
VD+12
VD+5
IC8802
NJM78L08A
OUT
IN
D8802
D8803
D8801
C8802
STBY
VD+5
VD+12
GNDV
GNDD
GNDD
VIDEO OUT
VIDEO AMP
9dB AMP+LPF
IC8801 MM1540BF
C8803
100/16
C8804
0.1 YF
C8812
1/50
C8809
STBY
(VCB)
(C)
(Y)
C8811
0.1
C8813
1/50
C8810
STBY
C8814
0.1
C8815
0.1
C8808
0.01
Vcc1
Vin
YCmix
Cin
CLP
Yin1
MUTE1
MUTE2
Yin2
GND
Cbin
Dual/SNG
Crin
Vee1
Vcc2
Vout
PS1
Cout
Vee2
Y1out
Vee2
Vee2
Y2out
Vee2
Cbout
PS2
Crout
Vee2
1 2 3 4 5 6 7 8 9 10 11 12 13 14
28 27 26 25 24 23 22 21 20 19 18 17 16 15
⑦ ⑥ ⑧ ⑨ ⑩
C8821
470/6.3
R8821
68
(VCB)
C8891
STBY
JA8801
VKB1063
V
1 2 4
C8822
330p
CH
C8831
470/6.3
R8831
68
C8832
330p
CH
L8831
VTL1087
(Y)
(C)
C8841
0.1
R8841
68
C8842
330p
CH
L8841
VTL1087
Y
C
R8842 10k
CN8802
AKP7008
C8823
YBL 1000p
GNDS
C8805
47/16
C8806
0.1
YF
GNDV
Q8802
RN2903
Q8801
RN1903
R8802
2.2k
R8803
10k
R8804
3.9k
Q8802
RN2903
Q8801
RN1903
GNDV

: The power supply is shown with the marked box.

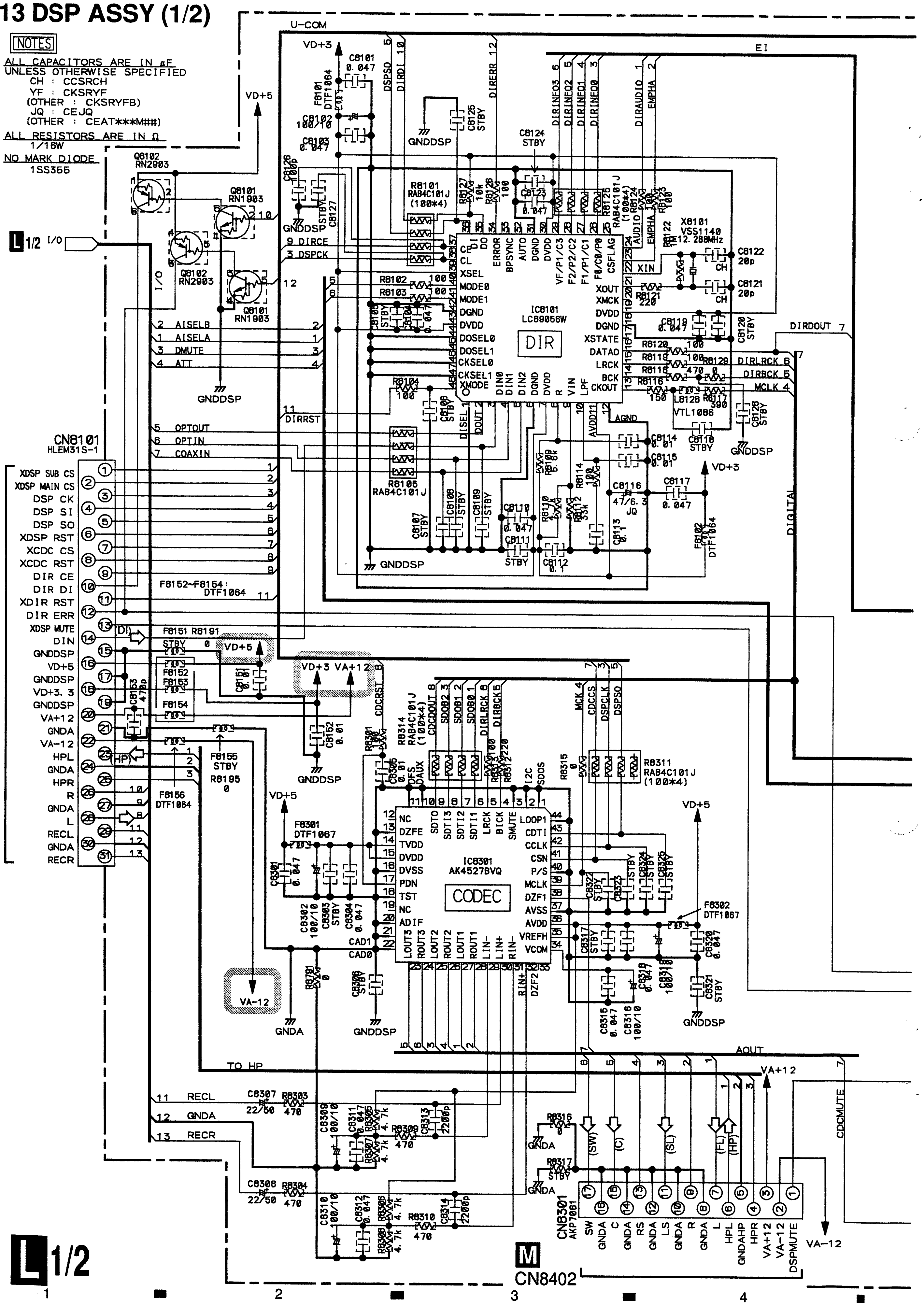
3.13 DSP ASSY (1/2)

NOTES

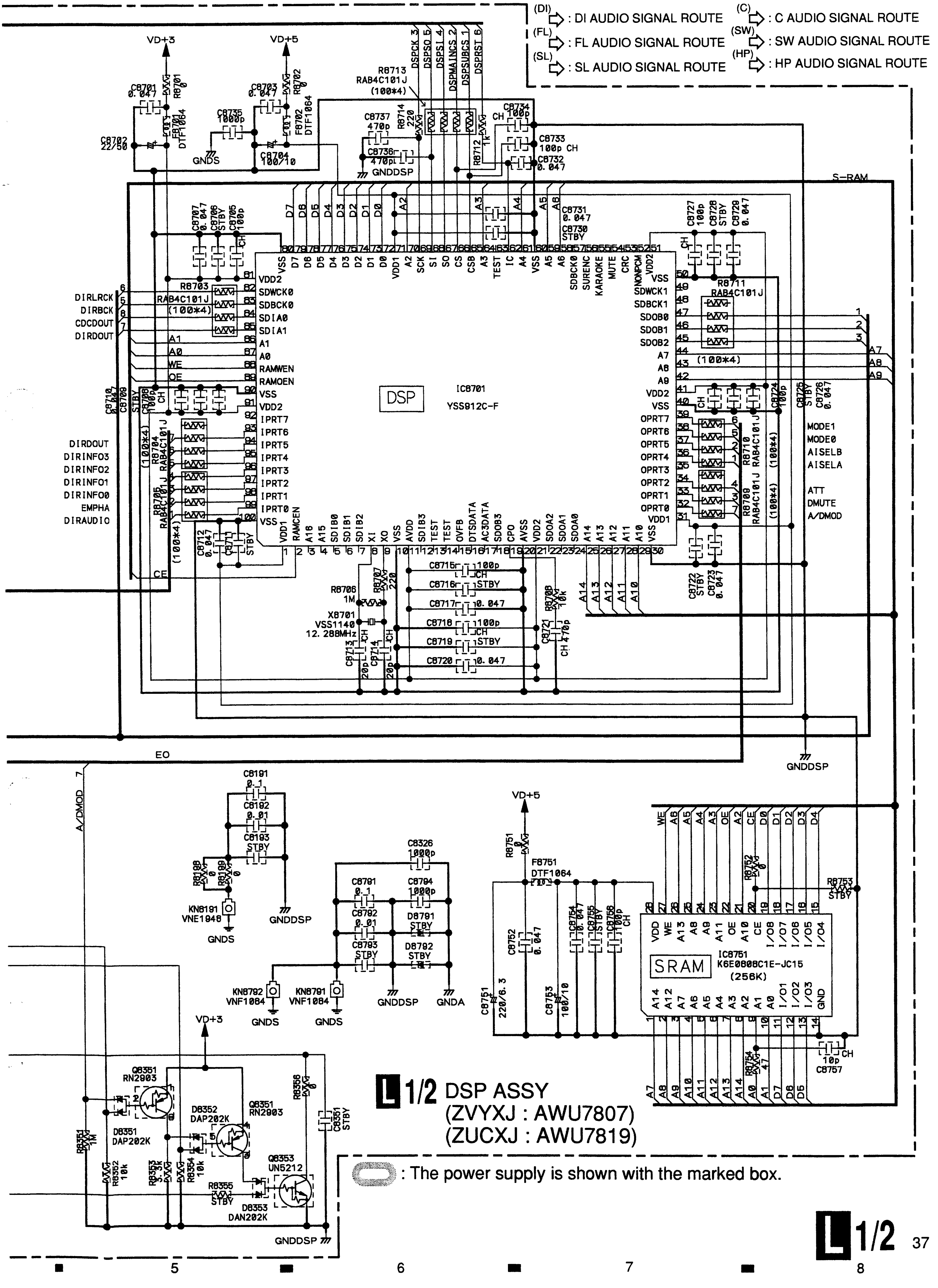
ALL CAPACITORS ARE IN µF
UNLESS OTHERWISE SPECIFIED
CH : CCSRCH
YF : CKSRYF
(OTHER : CKSRYFB)
JQ : CEJQ
(OTHER : CEAT✱✱✱M##)

ALL RESISTORS ARE IN Ω
1/16W

NO MARK DIODE
1SS355


U-COM
EI
VD+3
VD+5
VA+12
VA-12
IC8101 LC89056W DIR
IC8301 AK4527BVQ CODEC
Q8101 RN1903
Q8102 RN2903
X8101 VSS1140 12.288MHz
CN8101 HLEM31S-1
K 1/2 CN5507
XDSP SUB CS
XDSP MAIN CS
DSP CK
DSP SI
DSP SO
XDSP RST
XCDC CS
XCDC RST
DIR CE
DIR DI
XDIR RST
DIR ERR
XDSP MUTE
DIN
GNDDSP
VD+5
GNDDSP
VD+3.3
GNDDSP
VA+12
GNDA
VA-12
HPL
GNDA
HPR
R
GNDA
L
RECL
GNDA
RECR
L 1/2 I/O
AISELB
AISELA
DMUTE
ATT
OPTOUT
OPTIN
COAXIN
DIRRST
DIRCE
DSPCK
DSPSO
DIRDI
DIRERR
DIRINFO3
DIRINFO2
DIRINFO1
DIRINFO0
DIRAUDIO
EMPHA
DIRDOUT
DIRLRCK
DIRBCK
MCLK
DIGITAL
F8152~F8154: DTF1064
TO HP
AOUT
CDCMUTE
CDCRST
CDCDOUT
SDOB2
SDOB1
SDOB0
DIRLRCK
DIRBCK
MCK
CDCCS
DSPCLK
DSPSO
RECL
GNDA
RECR
M CN8402
CN8301 AKP7061
SW GNDA C GNDA RS GNDA LS GNDA R GNDA L HPL GNDAHP HPR VA+12 VA-12 DSPMUTE
(SW) (C) (SL) (FL) (HP)
GNDDSP
GNDA

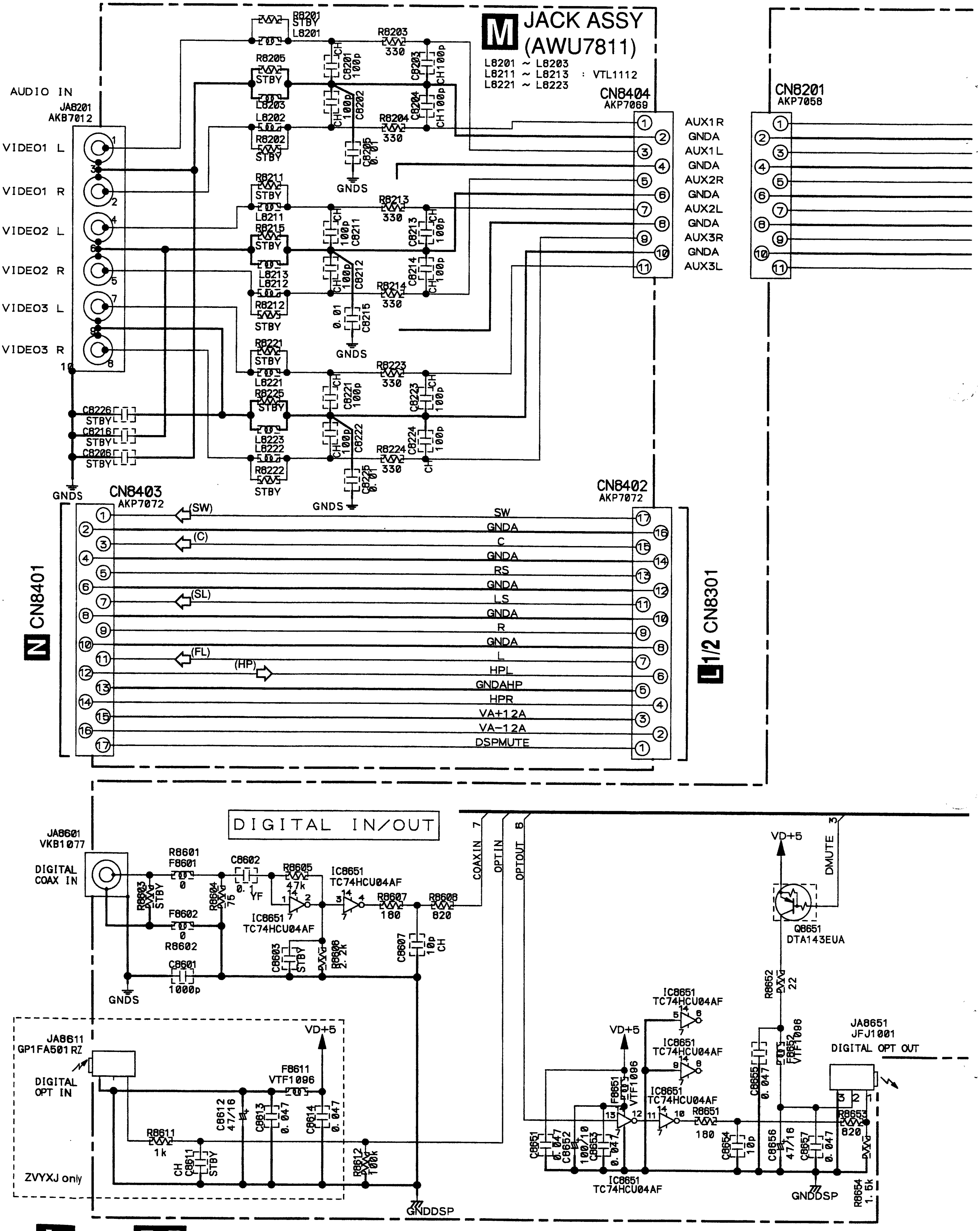
(DI) : DI AUDIO SIGNAL ROUTE
(C) : C AUDIO SIGNAL ROUTE
(FL) : FL AUDIO SIGNAL ROUTE
(SW) : SW AUDIO SIGNAL ROUTE
(SL) : SL AUDIO SIGNAL ROUTE
(HP) : HP AUDIO SIGNAL ROUTE

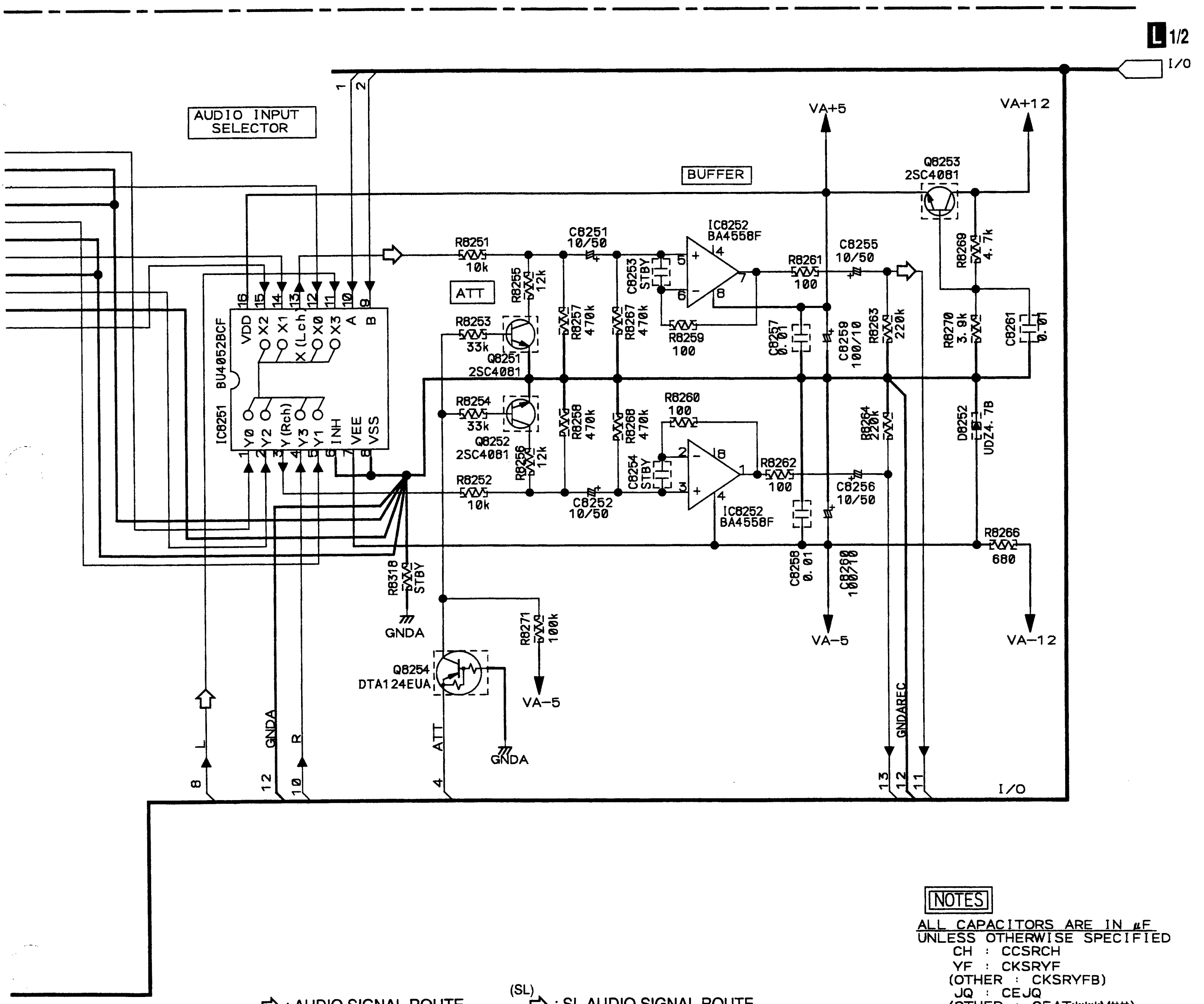

VD+3
VD+5
C8701 0.047
R8701 0
C8703 0.047
R8702 0
C8735 1000p
FB701 DTF1064
F8702 DTF1064
C8702 22/50
C8704 100/10
GNDS
R8713 RAB4C101J (100*4)
DSPCK 3
DSPSO 5
DSPSI 4
DSPMAINCS 2
DSPSUBCS 1
DSPRST 6
C8737 470p
R8714 220
C8736 470p
GNDDSP
C8734 100p CH
R8712 1k
C8733 100p CH
C8732 0.047
S-RAM
C8731 0.047
C8730 STBY
C8707 0.047
C8706 STBY
C8705 100p
C8727 100p
C8728 STBY
C8729 0.047
R8703 RAB4C101J (100*4)
R8711 RAB4C101J
DIRLRCK
DIRBCK
CDCDOUT
DIRDOUT
A1
A0
WE
OE
DSP
IC8701
YSS912C-F
VSS
VDD2
SDWCK0
SDBCK0
SDIA0
SDIA1
RAMWEN
RAMOEN
IPRT7
IPRT6
IPRT5
IPRT4
IPRT3
IPRT2
IPRT1
IPRT0
SDWCK1
SDBCK1
SDOB0
SDOB1
SDOB2
A7
A8
A9
OPRT7
OPRT6
OPRT5
OPRT4
OPRT3
OPRT2
OPRT1
OPRT0
VDD1
D7 D6 D5 D4 D3 D2 D1 D0
SCK SI SO CS CSB TEST IC
SDBCK0 SURENC KARAOKE MUTE CRC NONPCM
RAMCEN A16 A15 SDIB0 SDIB1 SDIB2 XI XO AVDD SDIB3 OVFB DTSDATA AC3DATA SDOB3 CPO AVSS SDOA2 SDOA1 SDOA0 A14 A13 A12 A11 A10
(100*4)
C8710 0.047
C8709 STBY
C8708 100p CH
R8704 RAB4C101J (100*4)
R8705 RAB4C101J (100*4)
DIRDOUT
DIRINFO3
DIRINFO2
DIRINFO1
DIRINFO0
EMPHA
DIRAUDIO
C8724 100p
C8725 STBY
C8726 0.047
R8710 RAB4C101J (100*4)
R8709 RAB4C101J (100*4)
MODE1
MODE0
AISELB
AISELA
ATT
DMUTE
A/DMOD
C8712 0.047
C8711 STBY
C8722 STBY
C8723 0.047
CE
C8715 100p CH
C8716 STBY
C8717 0.047
C8718 100p CH
C8719 STBY
C8720 0.047
R8706 1M
R8707 220
X8701 VSS1140 12.288MHz
C8713 20p CH
C8714 20p CH
R8708 10k
C8721 470p CH
EO
GNDDSP
A/DMOD 7
C8191 0.1
C8192 0.01
C8193 STBY
R8198 0
R8199 0
KN8191 VNE1948
GNDS
GNDDSP
C8326 1000p
C8791 0.1
C8794 1000p
C8792 0.01
D8791 STBY
C8793 STBY
D8792 STBY
KN8792 VNF1064
KN8791 VNF1064
GNDS
GNDDSP
GNDA
VD+5
R8751 0
F8751 DTF1064
C8752 0.047
C8754 0.047
C8755 STBY
C8756 100p CH
C8751 220/6.3
C8753 100/10
WE A8 A5 A4 A3 OE A2 CE D0 D1 D2 D3 D4
R8752 0
R8753 STBY
SRAM
IC8751
K6E0808C1E-JC15
(256K)
VDD WE A13 A8 A9 A11 OE A10 CE I/O8 I/O7 I/O6 I/O5 I/O4
A14 A12 A7 A6 A5 A4 A3 A2 A1 A0 I/O1 I/O2 I/O3 GND
R8754 47
C8757 10p CH
A7 A6 A9 A10 A11 A12 A13 A14 A0 A1 D7 D6 D5
VD+3
Q8351 RN2903
D8351 DAP202K
D8352 DAP202K
Q8351 RN2903
Q8353 UN5212
D8353 DAN202K
R8351 1M
R8352 10k
R8353 3.3k
R8354 10k
R8355 STBY
R8356 0
C8351 STBY
GNDDSP

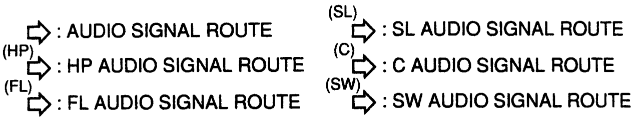
L 1/2 DSP ASSY
(ZVYXJ : AWU7807)
(ZUCXJ : AWU7819)

▢ : The power supply is shown with the marked box.

3.14 DSP (2/2) and JACK ASSYS


M JACK ASSY
(AWU7811)
L8201 ~ L8203
L8211 ~ L8213 : VTL1112
L8221 ~ L8223
AUDIO IN
JA8201
AKB7012
VIDEO1 L
VIDEO1 R
VIDEO2 L
VIDEO2 R
VIDEO3 L
VIDEO3 R
R8201 STBY
L8201
R8203 330
R8205 STBY
L8203
L8202
R8202 STBY
R8204 330
C8201 100p CH
C8202 100p CH
C8203 CH 100p
C8204 CH 100p
C8205 0.01
GNDS
R8211 STBY
L8211
R8215 STBY
L8213
L8212
R8212 STBY
R8213 330
R8214 330
C8211 100p CH
C8212 100p CH
C8213 100p CH
C8214 100p CH
C8215 0.01
R8221 STBY
L8221
R8225 STBY
L8223
L8222
R8222 STBY
R8223 330
R8224 330
C8221 100p CH
C8222 100p CH
C8223 100p CH
C8224 100p CH
C8225 0.01
C8226 STBY
C8216 STBY
C8206 STBY
CN8404
AKP7069
AUX1R
GNDA
AUX1L
GNDA
AUX2R
GNDA
AUX2L
GNDA
AUX3R
GNDA
AUX3L
CN8201
AKP7058
CN8403
AKP7072
CN8402
AKP7072
N CN8401
L 1/2 CN8301
(SW)
(C)
(SL)
(FL)
(HP)
SW
GNDA
C
GNDA
RS
GNDA
LS
GNDA
R
GNDA
L
HPL
GNDAHP
HPR
VA+12A
VA-12A
DSPMUTE
DIGITAL IN/OUT
JA8601
VKB1077
DIGITAL COAX IN
R8601 F8601 0
R8603 STBY
F8602 0 R8602
R8604 75
C8601 1000p
C8602 0.1 YF
R8605 47k
IC8651 TC74HCU04AF
R8607 180
R8608 820
C8603 STBY
R8606 2.2k
C8607 10p CH
COAXIN 7
OPTIN
OPTOUT 6
DMUTE 3
VD+5
Q8651
DTA143EUA
R8652 22
JA8611
GP1FA501RZ
DIGITAL OPT IN
F8611 VTF1096
R8611 1k
C8611 CH STBY
C8612 47/16
C8613 0.047
C8614 0.047
R8612 100k
ZVYXJ only
GNDDSP
F8651 VTF1096
C8651 0.047
C8652 100/10
C8653 0.047
R8651 180
C8654 10p
C8655 0.047
F8652 VTF1096
C8656 47/16
C8657 0.047
R8653 820
R8654 1.5k
JA8651
JFJ1001
DIGITAL OPT OUT


L 1/2
I/O
A
B
C
AUDIO INPUT SELECTOR
BUFFER
ATT
VA+5
VA+12
VA-5
VA-12
Q8253 2SC4081
IC8252 BA4558F
R8251 10k
C8251 10/50
C8253 STBY
R8255 12k
R8253 33k
Q8251 2SC4081
R8257 470k
R8267 470k
R8259 100
R8261 100
C8255 10/50
C8257 0.01
C8259 100/10
R8263 220k
R8269 4.7k
R8270 3.9k
C8261 0.01
D8252 UDZ4.7B
R8254 33k
Q8252 2SC4081
R8256 12k
R8258 470k
R8268 470k
R8260 100
C8254 STBY
R8252 10k
C8252 10/50
R8262 100
C8256 10/50
C8258 0.01
C8260 100/10
R8264 220k
R8266 680
IC8251 BU4052BCF
VDD X2 X1 X(Lch) X0 X3 A B
Y0 Y2 Y(Rch) Y3 Y1 INH VEE VSS
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
R8318 STBY
GNDA
R8271 100k
Q8254 DTA124EUA
L
GNDA
R
ATT
GNDAREC
8 12 10 4 13 12 11
1 2


⇨ : AUDIO SIGNAL ROUTE
(HP) ⇨ : HP AUDIO SIGNAL ROUTE
(FL) ⇨ : FL AUDIO SIGNAL ROUTE
(SL) ⇨ : SL AUDIO SIGNAL ROUTE
(C) ⇨ : C AUDIO SIGNAL ROUTE
(SW) ⇨ : SW AUDIO SIGNAL ROUTE

NOTES

ALL CAPACITORS ARE IN μF
UNLESS OTHERWISE SPECIFIED
CH : CCSRCH
YF : CKSRYF
(OTHER : CKSRYFB)
JQ : CEJQ
(OTHER : CEAT∗∗∗M##)

ALL RESISTORS ARE IN Ω
1/16W

NO MARK DIODE
1SS355

L 2/2 DSP ASSY
(ZVYXJ : AWU7807)
(ZUCXJ : AWU7819)

3.15 BALANCE ASSY

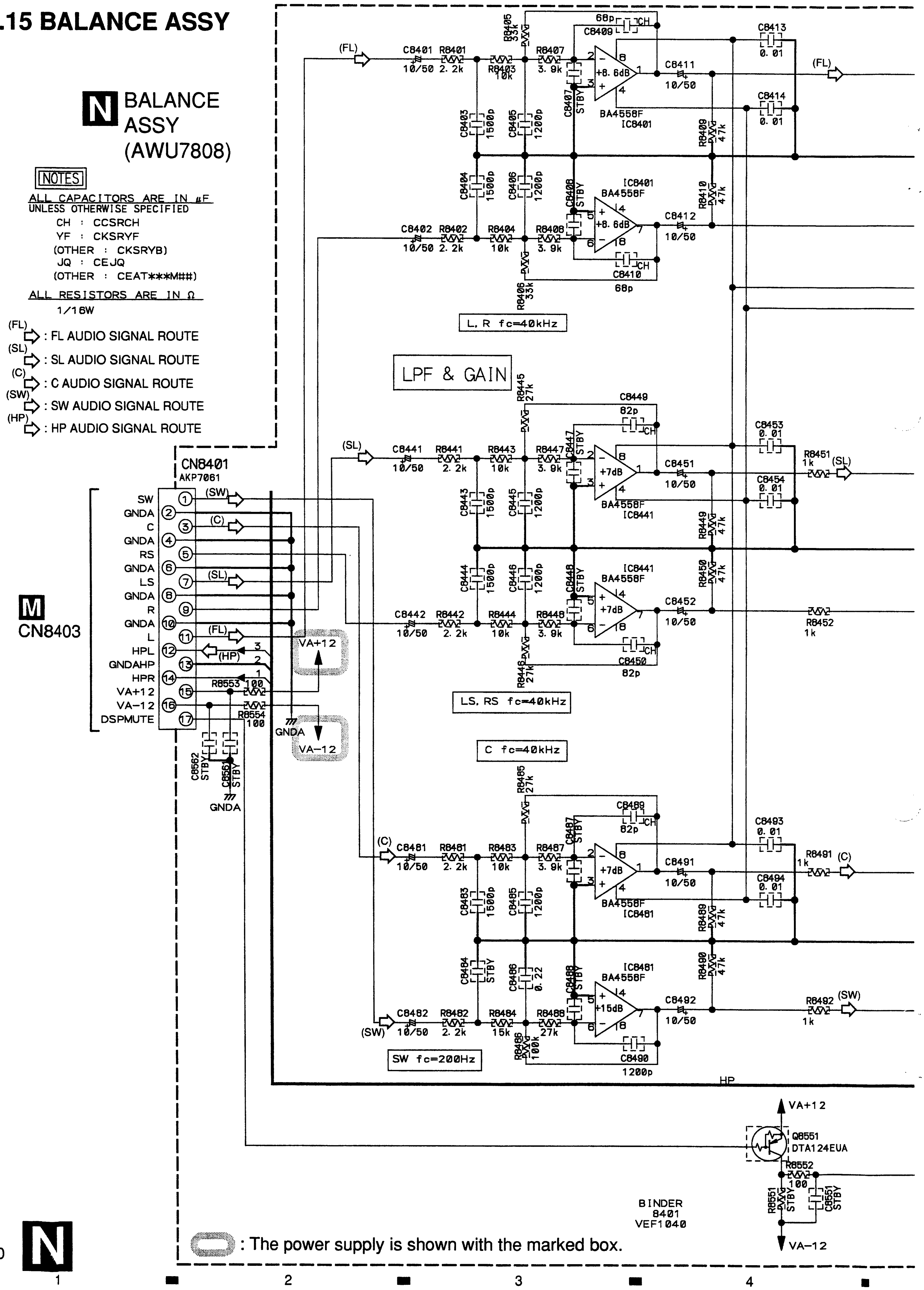
N BALANCE ASSY (AWU7808)

NOTES

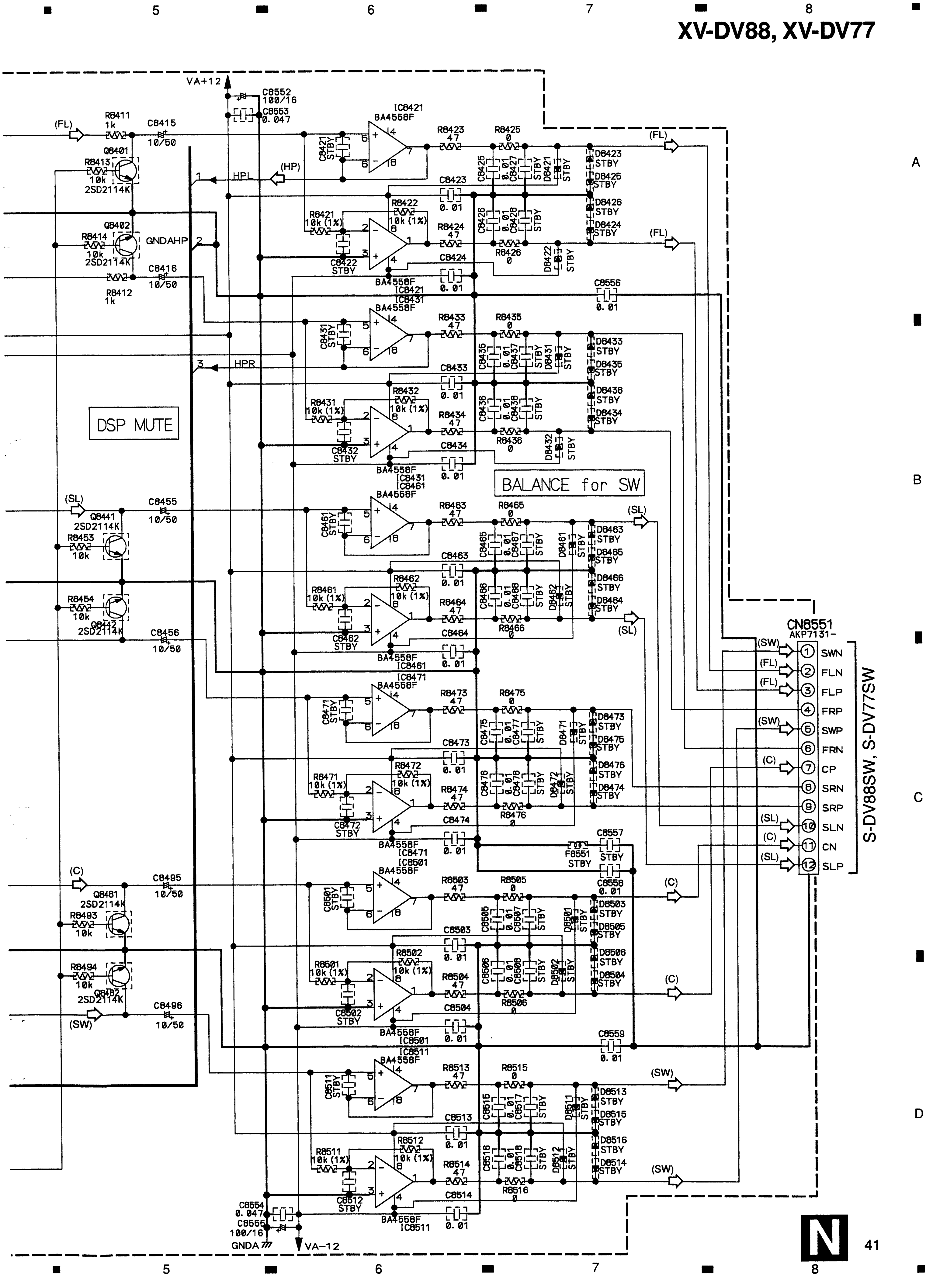
ALL CAPACITORS ARE IN μF
UNLESS OTHERWISE SPECIFIED
CH : CCSRCH
YF : CKSRYF
(OTHER : CKSRYB)
JQ : CEJQ
(OTHER : CEAT✱✱✱M##)

ALL RESISTORS ARE IN Ω
1/16W

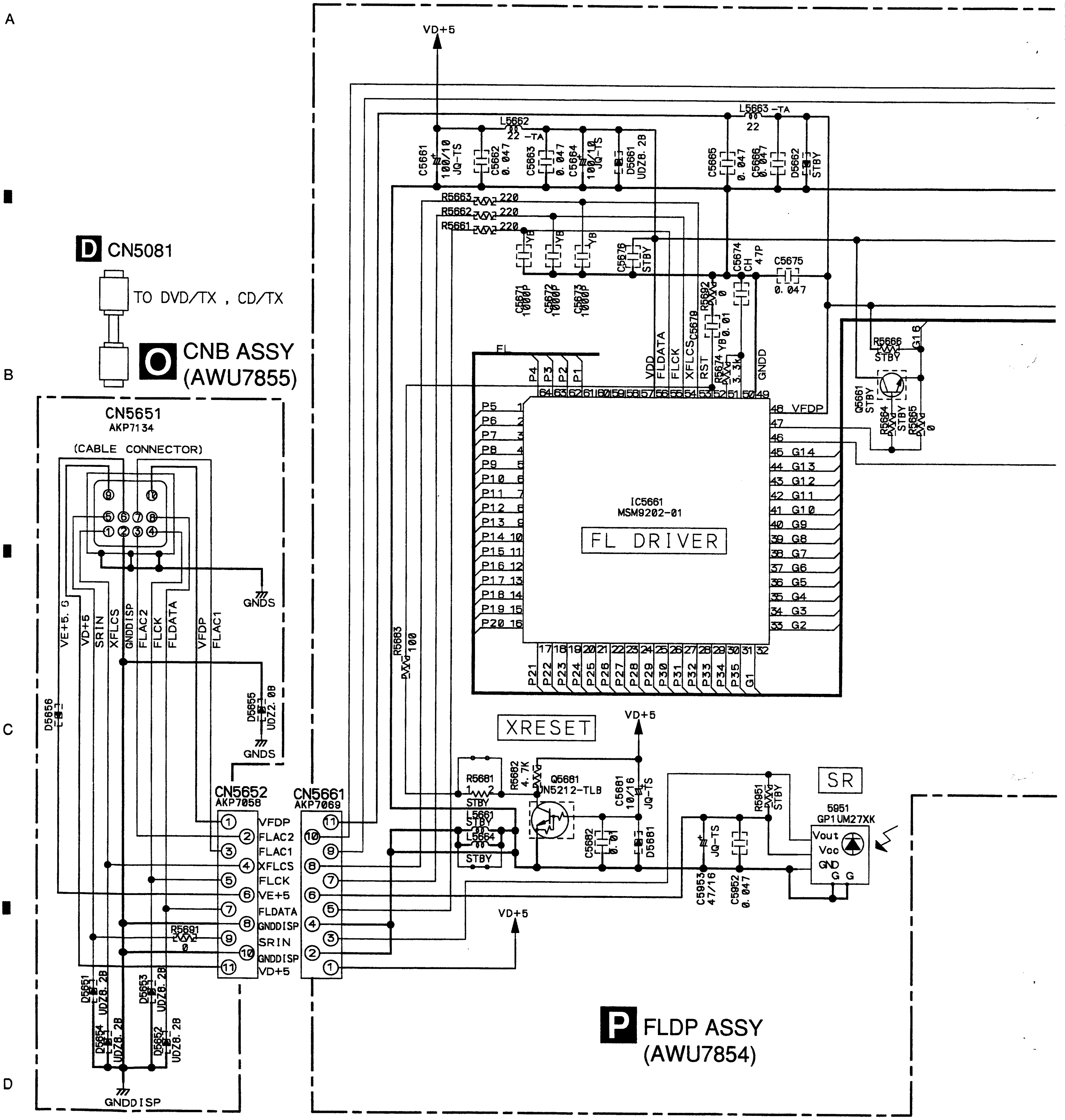
(FL) ⇨ : FL AUDIO SIGNAL ROUTE
(SL) ⇨ : SL AUDIO SIGNAL ROUTE
(C) ⇨ : C AUDIO SIGNAL ROUTE
(SW) ⇨ : SW AUDIO SIGNAL ROUTE
(HP) ⇨ : HP AUDIO SIGNAL ROUTE

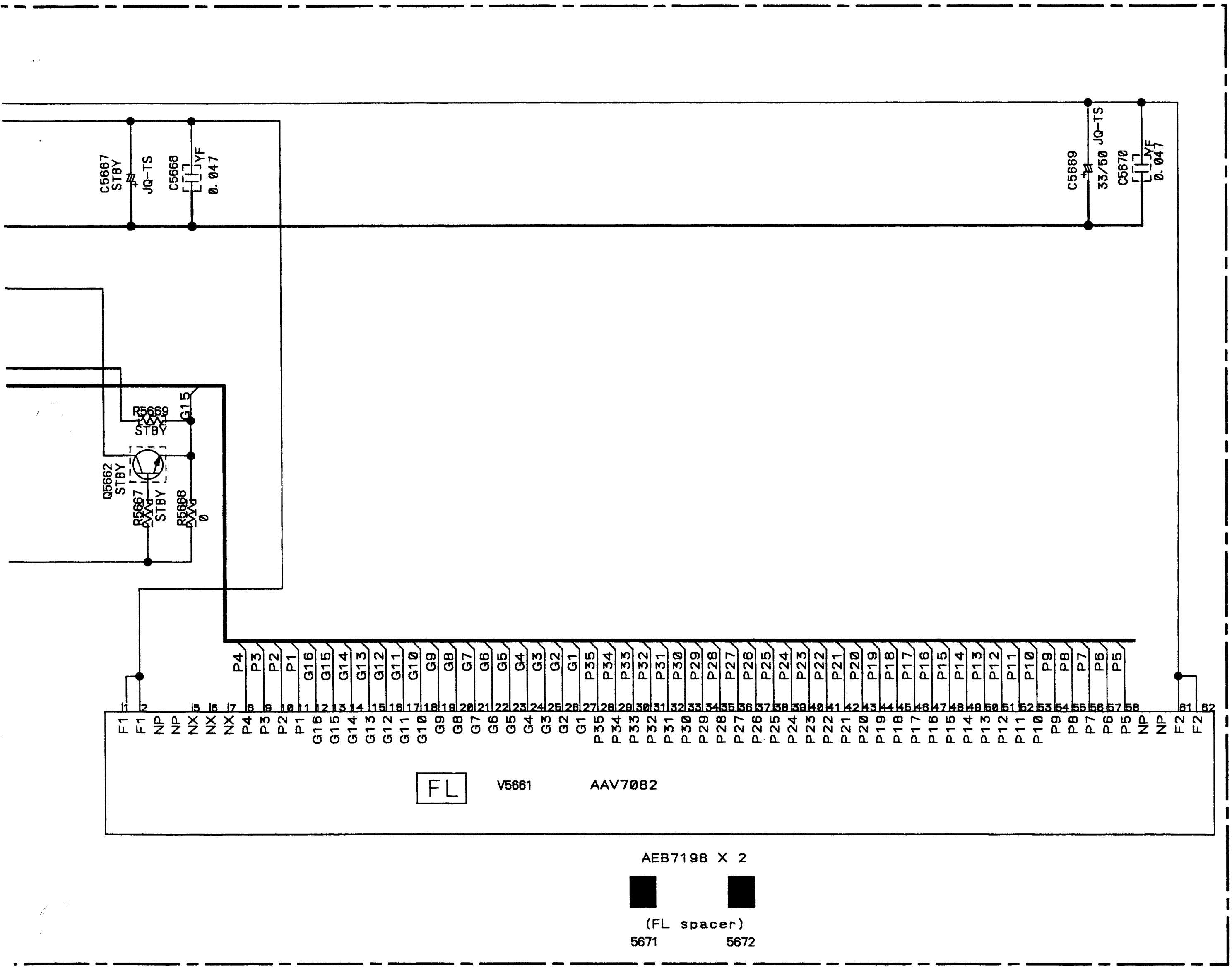

M
CN8403
CN8401
AKP7061
SW
GNDA
C
GNDA
RS
GNDA
LS
GNDA
R
GNDA
L
HPL
GNDAHP
HPR
VA+12
VA-12
DSPMUTE
(SW)
(C)
(SL)
(FL)
(HP)
R8553 100
R8554 100
C8562 STBY
C8561 STBY
GNDA
VA+12
VA-12
C8401 10/50
R8401 2.2k
R8403 10k
R8405 33k
R8407 3.9k
C8409 68p CH
C8407 STBY
+8.6dB
BA4558F
IC8401
C8411 10/50
C8413 0.01
C8414 0.01
R8409 47k
C8403 1500p
C8405 1200p
C8404 1500p
C8406 1200p
C8408 STBY
R8410 47k
C8402 10/50
R8402 2.2k
R8404 10k
R8408 3.9k
R8406 33k
C8410 68p CH
C8412 10/50
L, R fc=40kHz
LPF & GAIN
R8445 27k
C8449 82p CH
C8441 10/50
R8441 2.2k
R8443 10k
R8447 3.9k
C8447 STBY
+7dB
BA4558F
IC8441
C8451 10/50
C8453 0.01
C8454 0.01
R8451 1k
R8449 47k
C8443 1500p
C8445 1200p
C8444 1500p
C8446 1200p
C8448 STBY
R8450 47k
C8442 10/50
R8442 2.2k
R8444 10k
R8448 3.9k
R8446 27k
C8450 82p CH
C8452 10/50
R8452 1k
LS, RS fc=40kHz
C fc=40kHz
R8485 27k
C8489 82p CH
C8481 10/50
R8481 2.2k
R8483 10k
R8487 3.9k
C8487 STBY
+7dB
BA4558F
IC8481
C8491 10/50
C8493 0.01
C8494 0.01
R8491 1k
R8489 47k
C8483 1500p
C8485 1200p
C8484 STBY
C8486 0.22
C8488 STBY
R8490 47k
+15dB
C8482 10/50
R8482 2.2k
R8484 15k
R8488 27k
R8486 100k
C8490 1200p
C8492 10/50
R8492 1k
SW fc=200Hz
HP
VA+12
Q8551
DTA124EUA
R8552 100
R8551 STBY
C8551 STBY
VA-12
BINDER
8401
VEF1040

▭ : The power supply is shown with the marked box.


5
6
7
8
A
B
C
D
VA+12
C8552
100/16
C8553
0.047
IC8421
BA4558F
R8411
1k
(FL)
C8415
10/50
Q8401
R8413
10k
2SD2114K
HPL
(HP)
C8421
STBY
R8423
47
R8425
0
D8423
STBY
D8425
STBY
C8425
0.01
C8427
STBY
D8421
STBY
C8423
0.01
R8422
10k (1%)
R8421
10k (1%)
D8426
STBY
D8424
STBY
Q8402
R8414
10k
2SD2114K
GNDAHP
R8424
47
C8426
0.01
C8428
STBY
R8426
0
C8422
STBY
C8424
D8422
STBY
C8416
10/50
R8412
1k
BA4558F
IC8421
C8556
0.01
IC8431
BA4558F
C8431
STBY
R8433
47
R8435
0
D8433
STBY
D8435
STBY
C8435
0.01
C8437
STBY
D8431
STBY
HPR
C8433
0.01
R8432
10k (1%)
R8431
10k (1%)
D8436
STBY
D8434
STBY
DSP MUTE
R8434
47
C8436
0.01
C8438
STBY
R8436
0
C8432
STBY
C8434
D8432
STBY
BA4558F
IC8431
0.01
BALANCE for SW
IC8461
BA4558F
(SL)
C8455
10/50
Q8441
2SD2114K
R8453
10k
C8461
STBY
R8463
47
R8465
0
D8463
STBY
D8465
STBY
C8465
0.01
C8467
STBY
D8461
STBY
C8463
0.01
R8462
10k (1%)
R8461
10k (1%)
D8466
STBY
D8464
STBY
R8454
10k
Q8442
2SD2114K
R8464
47
C8466
0.01
C8468
STBY
D8462
STBY
R8466
0
C8462
STBY
C8464
C8456
10/50
BA4558F
IC8461
0.01
(SL)
CN8551
AKP7131-
(SW) ① SWN
(FL) ② FLN
(FL) ③ FLP
④ FRP
(SW) ⑤ SWP
⑥ FRN
(C) ⑦ CP
⑧ SRN
⑨ SRP
(SL) ⑩ SLN
(C) ⑪ CN
(SL) ⑫ SLP
S-DV88SW, S-DV77SW
IC8471
BA4558F
C8471
STBY
R8473
47
R8475
0
D8473
STBY
D8475
STBY
C8475
0.01
C8477
STBY
D8471
STBY
C8473
0.01
R8472
10k (1%)
R8471
10k (1%)
D8476
STBY
D8474
STBY
R8474
47
C8476
0.01
C8478
STBY
D8472
STBY
R8476
0
C8472
STBY
C8474
BA4558F
IC8471
0.01
C8557
F8551
STBY
STBY
C8558
0.01
IC8501
BA4558F
(C)
C8495
10/50
Q8481
2SD2114K
R8493
10k
C8501
STBY
R8503
47
R8505
0
D8503
STBY
D8505
STBY
C8505
0.01
C8507
STBY
D8501
STBY
C8503
0.01
R8502
10k (1%)
R8501
10k (1%)
D8506
STBY
D8504
STBY
R8494
10k
Q8482
2SD2114K
R8504
47
C8506
0.01
C8508
STBY
D8502
STBY
R8506
0
C8502
STBY
C8504
(SW)
C8496
10/50
BA4558F
IC8501
0.01
C8559
0.01
IC8511
BA4558F
C8511
STBY
R8513
47
R8515
0
D8513
STBY
D8515
STBY
C8515
0.01
C8517
STBY
D8511
STBY
C8513
0.01
R8512
10k (1%)
R8511
10k (1%)
D8516
STBY
D8514
STBY
R8514
47
C8516
0.01
C8518
STBY
D8512
STBY
R8516
0
C8512
STBY
C8514
C8554
0.047
C8555
100/16
GNDA
VA-12
BA4558F
IC8511
0.01
(SW)
(SW)

3.16 CNB and FLDP ASSYS


A
B
C
D
VD+5
L5662 22 -TA
L5663 -TA 22
C5661 100/10 JQ-TS
C5662 0.047
C5663 0.047
C5664 100/10 JQ-TS
D5661 UDZ8.2B
C5665 0.047
C5666 0.047
D5662 STBY
R5663 220
R5662 220
R5661 220
C5671 1000P YB
C5672 1000P YB
C5673 1000P YB
C5676 STBY
C5674 CH 47P
C5675 0.047
R5692 0
C5679 0.01
R5674 YB 3.3k
R5666 STBY
G16
Q5661 STBY
R5664 STBY
R5665 0
D CN5081
TO DVD/TX , CD/TX
O CNB ASSY (AWU7855)
CN5651 AKP7134
(CABLE CONNECTOR)
GNDS
VE+5.6
VD+5
SRIN
XFLCS
GNDDISP
FLAC2
FLCK
FLDATA
VFDP
FLAC1
D5656
D5655 UDZ2.0B
FL
P1 P2 P3 P4
VDD FLDATA FLCK XFLCS RST GNDD
48 VFDP
45 G14
44 G13
43 G12
42 G11
41 G10
40 G9
39 G8
38 G7
37 G6
36 G5
35 G4
34 G3
33 G2
P5 … P20
P21 … P35 G1
IC5661 MSM9202-01
FL DRIVER
R5683 100
XRESET
VD+5
R5681 STBY
R5682 4.7K
Q5681 UN5212-TLB
C5681 10/16 JQ-TS
C5682 0.01
D5681
L5661 STBY
L5664
STBY
SR
R5951 STBY
5951 GP1UM27XK
Vout Vcc GND G G
C5953 47/16 JQ-TS
C5952 0.047
CN5652 AKP7058
CN5661 AKP7069
① VFDP
② FLAC2
③ FLAC1
④ XFLCS
⑤ FLCK
⑥ VE+5
⑦ FLDATA
⑧ GNDDISP
⑨ SRIN
⑩ GNDDISP
⑪ VD+5
R5691 0
D5651 UDZ8.2B
D5653 UDZ8.2B
D5654 UDZ8.2B
D5652 UDZ8.2B
GNDDISP
P FLDP ASSY (AWU7854)


C5667
STBY
JQ-TS
C5668
YF
0.047
C5669
JQ-TS
33/50
C5670
YF
0.047
R5669
STBY
G15
Q5662
STBY
R5667
STBY
R5668
0
P4 P3 P2 P1 G16 G15 G14 G13 G12 G11 G10 G9 G8 G7 G6 G5 G4 G3 G2 G1 P35 P34 P33 P32 P31 P30 P29 P28 P27 P26 P25 P24 P23 P22 P21 P20 P19 P18 P17 P16 P15 P14 P13 P12 P11 P10 P9 P8 P7 P6 P5
F1 F1 NP NP NX NX NX P4 P3 P2 P1 G16 G15 G14 G13 G12 G11 G10 G9 G8 G7 G6 G5 G4 G3 G2 G1 P35 P34 P33 P32 P31 P30 P29 P28 P27 P26 P25 P24 P23 P22 P21 P20 P19 P18 P17 P16 P15 P14 P13 P12 P11 P10 P9 P8 P7 P6 P5 NP NP F2 F2
1 2 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 61 62
FL
V5661
AAV7082
AEB7198 X 2
(FL spacer)
5671
5672
A
B
C

NOTES

ALL CAPACITORS ARE IN µF
UNLESS OTHERWISE SPECIFIED

CH : CCSRCH
YF : CKSRYF
(OTHER : CKSRYB)

: CEJQ -TS
JQ-TS

ALL RESISTORS ARE IN Ω

1/16W
1/4WPU

ALL INDUCTORS ARE IN µH

LAU -TA
-TA

NO MARK DIODE

1SS355

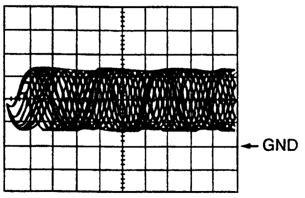
■ WAVEFORMS

Note : The encircled numbers denote measuring point in the schematic diagram.

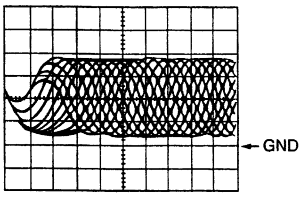
B DVDM ASSY

Measurement condition : No. 1 to 4 and 6 to 11 : MJK1, Title 1-chp 1
No. 5 : CD, ABEX-784 Track 1

① **Foot of R104 (RF)**
V: 100mV/div. H: 0.2µsec/div.

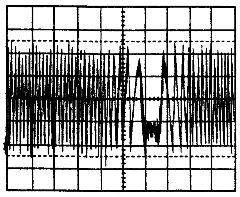


② **TP117 (RFO)**
V: 500mV/div. H: 0.1µsec/div.

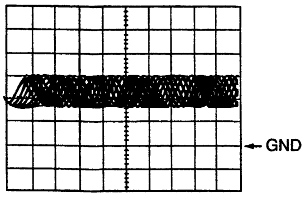


③

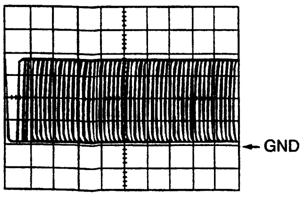
④ **TP122 (Tracking Error)**
(Al-Inner Tracking Off)
V: 500mV/div. H: 2msec/div.



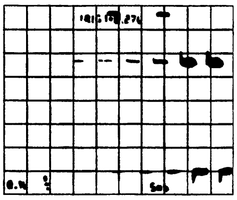
⑤ **IC201 - pin 39 (EFM before slice)**
V: 1V/div. H: 1µsec/div.



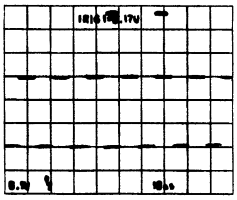
⑥ **IC201 - pin 1 (EFM)**
V: 1V/div. H: 0.2µsec/div.



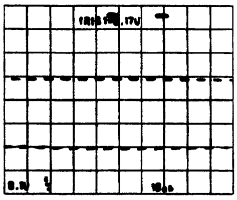
⑦ **TP209 (FG)**
V: 1V/div. H: 5msec/div.



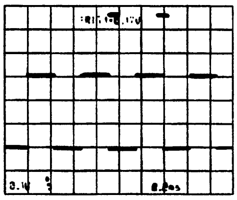
⑧ **Foot of R261 (FPWM)**
V: 1V/div. H: 5msec/div.



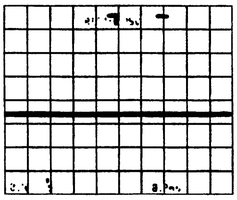
⑨ **Foot of R262 (VPWM)**
V: 1V/div. H: 5msec/div.



⑩ **Foot of R263 (PPWM)**
V: 1V/div. H: 5msec/div.



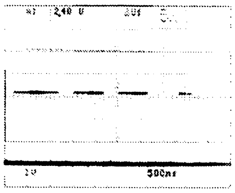
⑪ **Foot of R264 (RPWM)**
V: 1V/div. H: 5msec/div.



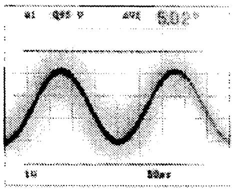
G SIDER ASSY

Measurement condition : No. 1 to 5 : DVD-REF-A1, T2-Chap.1

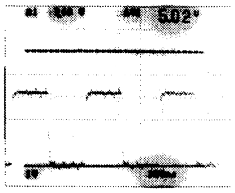
① **IC5401 - pin 2 (ADATA)**
V: 1V/div. H: 500nsec/div.



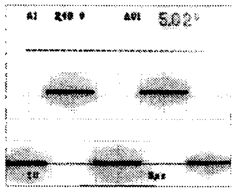
② **IC5401 - pin 7, 8 (AUDIO L, R)**
V: 1V/div. H: 50µsec/div.



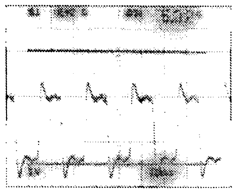
③ **IC5401 - pin 1 (BCK)**
V: 1V/div. H: 100nsec/div.



④ **IC5401 - pin 3 (LRCK)**
V: 1V/div. H: 5µsec/div.



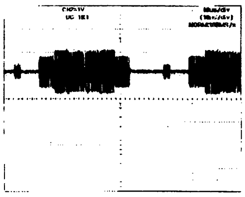
⑤ **IC5401 - pin 16 (MCK)**
V: 1V/div. H: 20nsec/div.



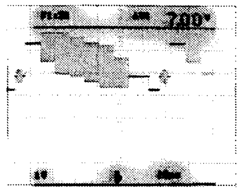
K MOTHER ASSY

No. 6 to 10 : DVD-REF-A1, T2-Chap.19

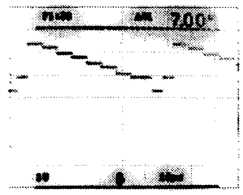
⑥ **IC8801 - pin 25 (C)**
V: 1V/div. H: 10µsec/div.



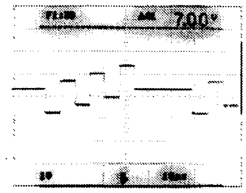
⑦ **IC8801 - pin 27 (V)**
V: 1V/div. H: 10µsec/div.



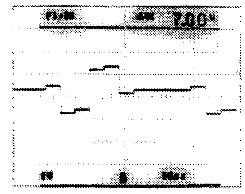
⑧ **IC8801 - pin 23 (Y)**
V: 1V/div. H: 10µsec/div.



⑨ **IC8801 - pin 18 (Cb)**
V: 1V/div. H: 10µsec/div.



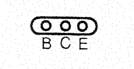
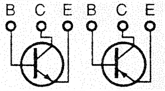
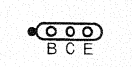
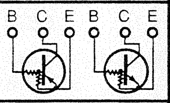
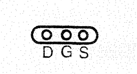
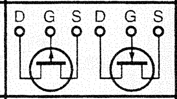
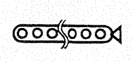
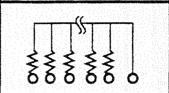
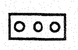
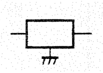
⑩ **IC8801 - pin 16 (Cr)**
V: 1V/div. H: 10µsec/div.



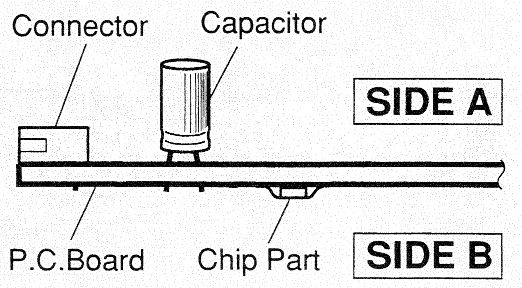
4. PCB CONNECTION DIAGRAM

NOTE FOR PCB DIAGRAMS :

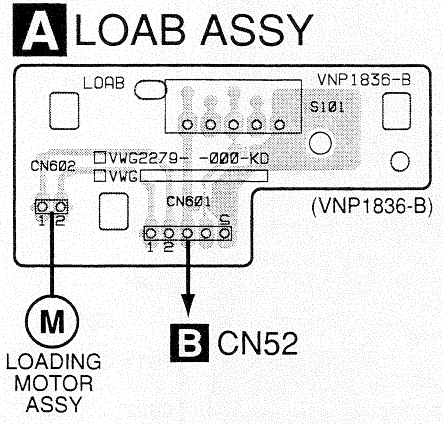
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

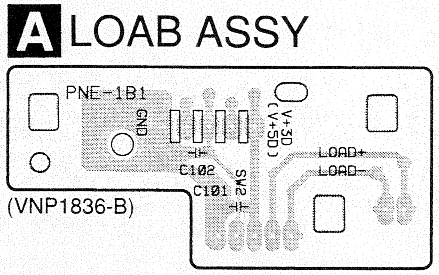
3. The parts mounted on this PCB include all necessary parts for several destinations.
   For further information for respective destinations, be sure to check with the schematic diagram.
4. View point of PCB diagrams.


Connector
Capacitor
SIDE A
P.C.Board
Chip Part
SIDE B

4.1 LOAB ASSY


A LOAB ASSY
LOAB
VNP1836-B
S101
CN602
VWG2279- -000-KD
VWG
CN601
5
1 2
1 2
(VNP1836-B)
M
LOADING MOTOR ASSY
B CN52

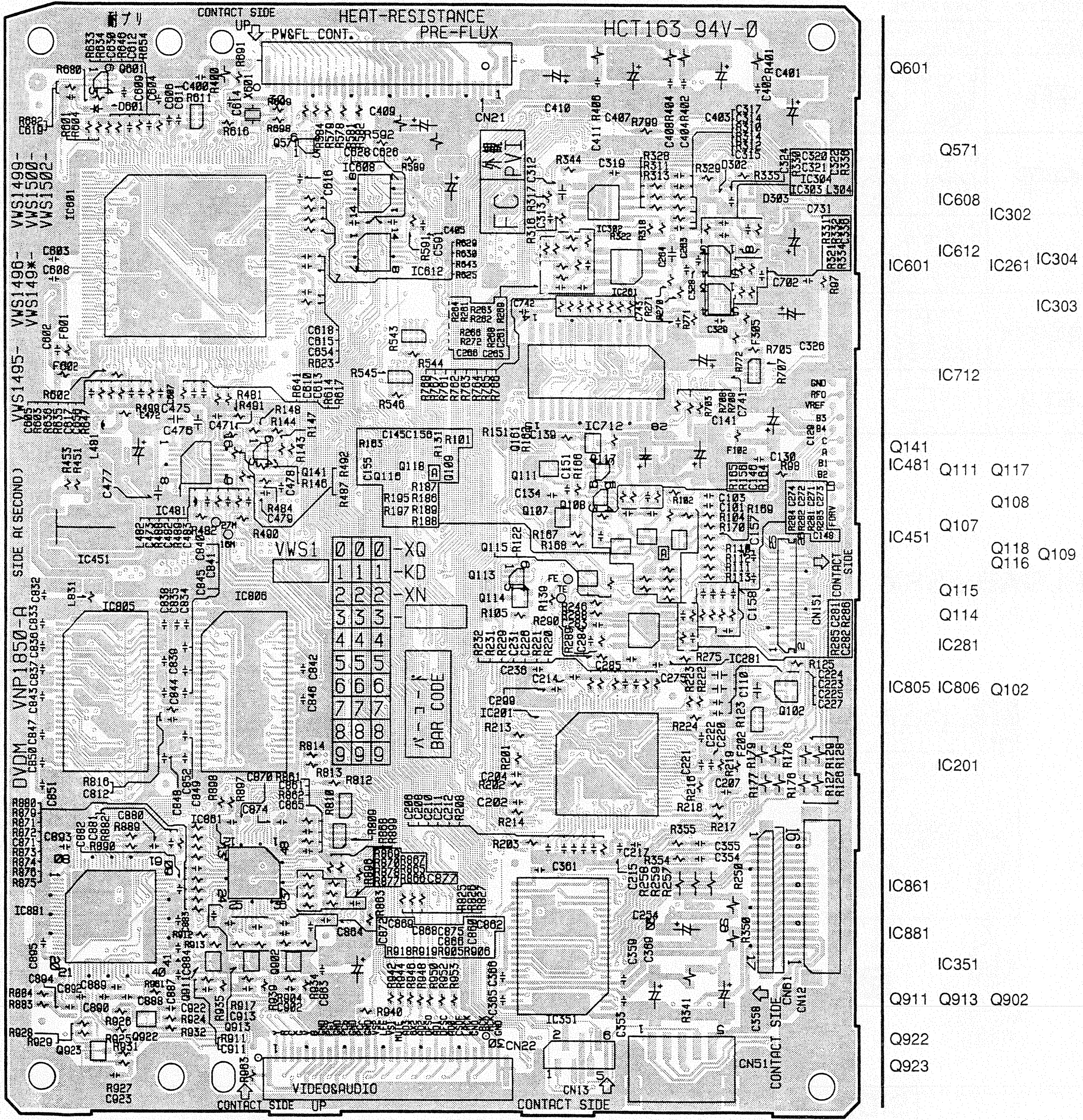
SIDE A


A LOAB ASSY
PNE-1B1
GND
V+5D
(V+5D)
C102
C101
SW2
LOAD+
LOAD-
(VNP1836-B)

SIDE B

4.2 DVDM ASSY

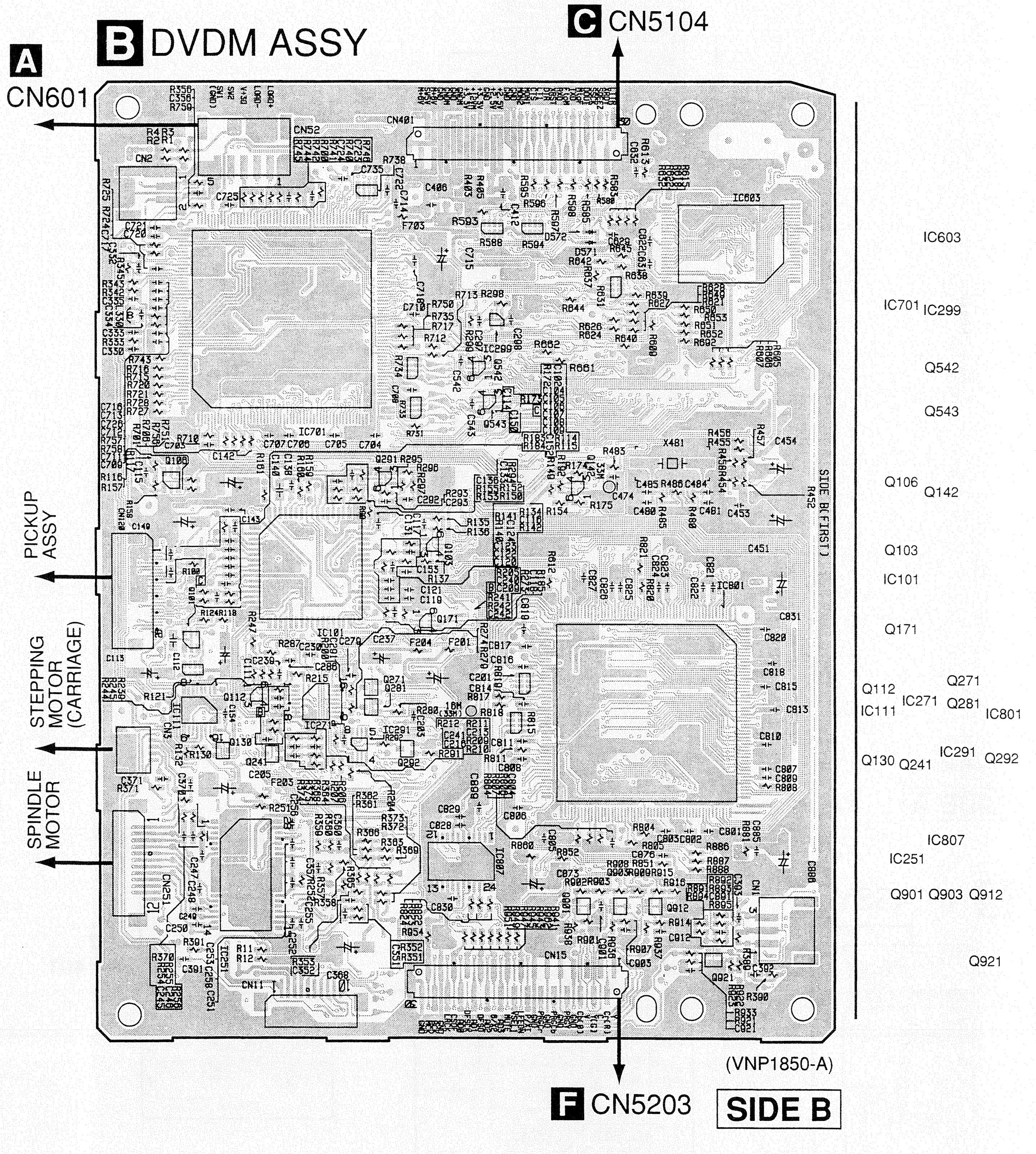
B DVDM ASSY


CONTACT SIDE
UP
PW&FL CONT.
HEAT-RESISTANCE
PRE-FLUX
HCT163 94V-0
CN21
IC601
IC608
IC612
IC261
IC712
IC481
IC451
IC805
IC806
IC201
IC881
IC351
CN22
CN13
CN51
VIDEO&AUDIO
CONTACT SIDE
VWS1
XQ
KD
XN
BAR CODE
VWS1495-
VWS1496-
VWS149*-
VWS1499-
VWS1500-
VWS1502-
DVDM VNP1850-A
SIDE A(SECOND)
CONTACT SIDE
Q601
Q571
IC608
IC302
IC601
IC612
IC261
IC304
IC303
IC712
Q141
IC481
Q111
Q117
Q108
IC451
Q107
Q118
Q116
Q109
Q115
Q114
IC281
IC805
IC806
Q102
IC201
IC861
IC881
IC351
Q911
Q913
Q902
Q922
Q923

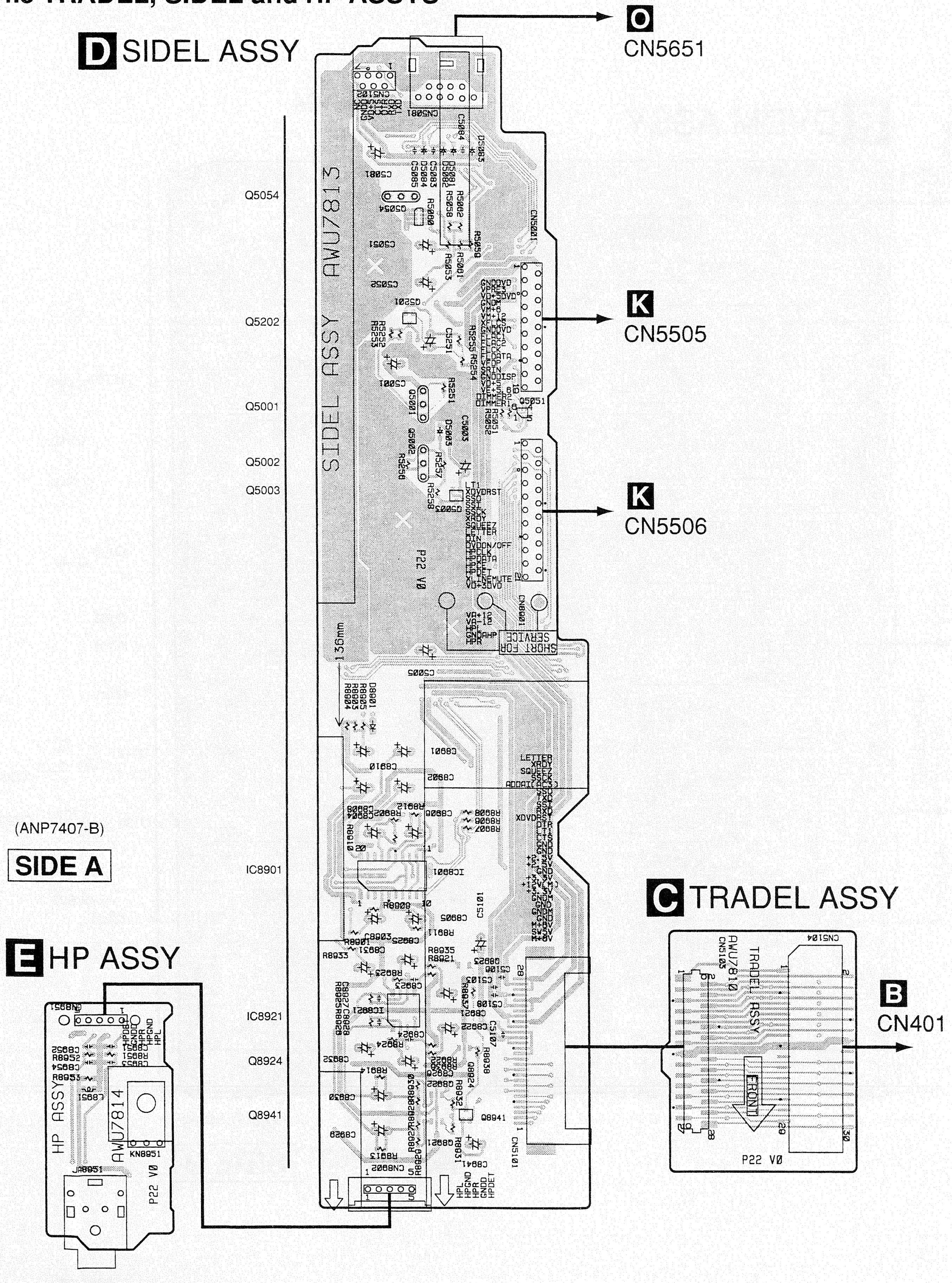
(VNP1850-A)

SIDE A

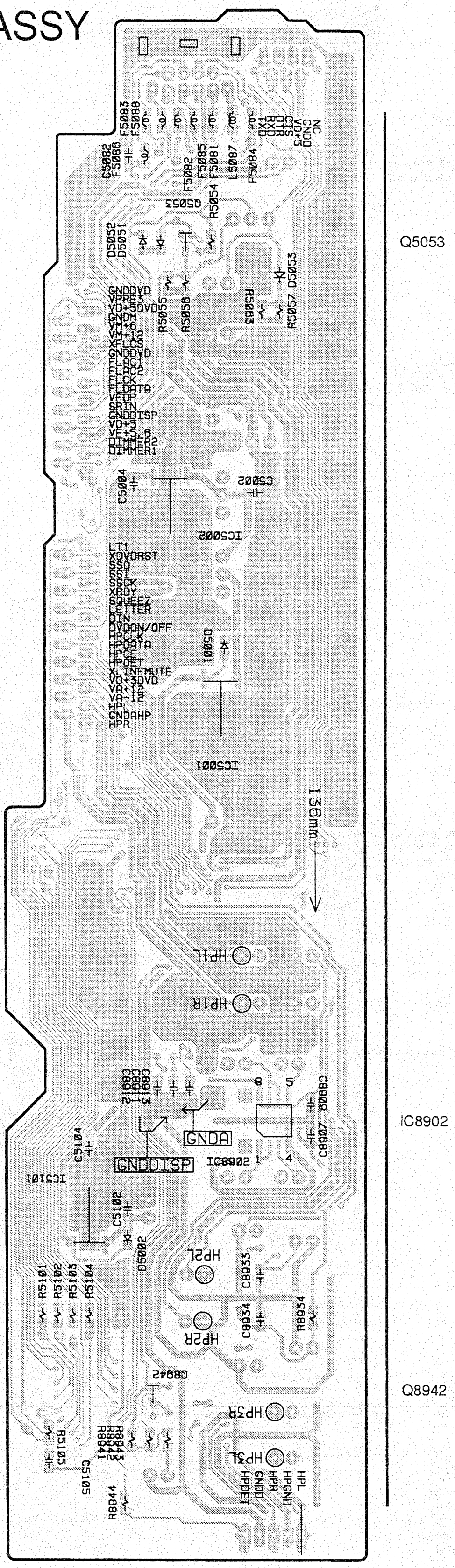
B DVDM ASSY


A
CN601
C CN5104
PICKUP ASSY
STEPPING MOTOR (CARRIAGE)
SPINDLE MOTOR
SIDE B(FIRST)
(VNP1850-A)
F CN5203
SIDE B
IC603
IC701
IC299
Q542
Q543
Q106
Q142
Q103
IC101
Q171
Q112
IC111
IC271
Q271
Q281
IC801
Q130
Q241
IC291
Q292
IC807
IC251
Q901
Q903
Q912
Q921

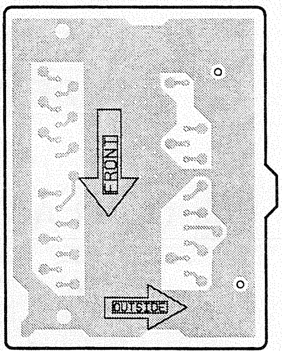
4.3 TRADEL, SIDEL and HP ASSYS


D SIDEL ASSY
O CN5651
K CN5505
K CN5506
Q5054
Q5202
Q5001
Q5002
Q5003
IC8901
IC8921
Q8924
Q8941
SIDEL ASSY AWU7813
136mm
P22 V0
SHORT FOR SERVICE
(ANP7407-B)
SIDE A
C TRADEL ASSY
TRADEL ASSY AWU7810
CN5103
CN5104
FRONT
P22 V0
B CN401
E HP ASSY
HP ASSY AWU7814
CN8951
KN8951
JA8951
P22 V0

D SIDEL ASSY


F5083
F5088
C5082
F5088
NC
GNDD
VD+5
CTS
DTR
RXD
TXD
F5082
F5085
F5081
L5087
F5084
R5054
Q5053
D5052
D5051
D5053
R5057
R5083
R5055
R5058
GNDDVD
VPRE3
VD+5DVD
GNDI
VM+6
VM+12
XFLCS
GNDDVD
FLACC1
FLACC2
FLCK
FLDATA
VFOP
SRIN
GNDDISP
VD+5
VE+5.8
DIMMER2
DIMMER1
C5004
C5002
IC5002
LT1
XDVDRST
SSD
SSI
SSCK
XRDY
SQUEEZ
LETTER
DIN
DVDON/OFF
HPCLK
HPDATA
HPCE
HPDET
XLINEMUTE
VD+3DVD
VA+12
VA-12
HPL
GNDAHP
HPR
D5001
IC5001
136mm
HP1L
HP1R
C8913
C8911
C8912
8
5
C8908
C8907
GNDA
GNDDISP
IC8902
1
4
C5104
IC5101
C5102
D5002
R5101
R5102
R5103
R5104
HP2L
HP2R
C8933
C8934
R8934
Q8942
HP3R
HP3L
R5105
C5105
R8843
R8842
R8841
R8844
HPL
HPGND
HPR
GNDD
HPDET
Q5053
IC8902
Q8942

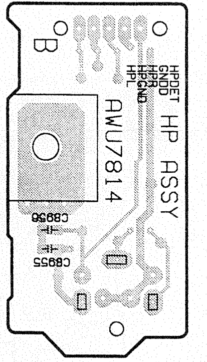
C TRADEL ASSY


FRONT
OUTSIDE

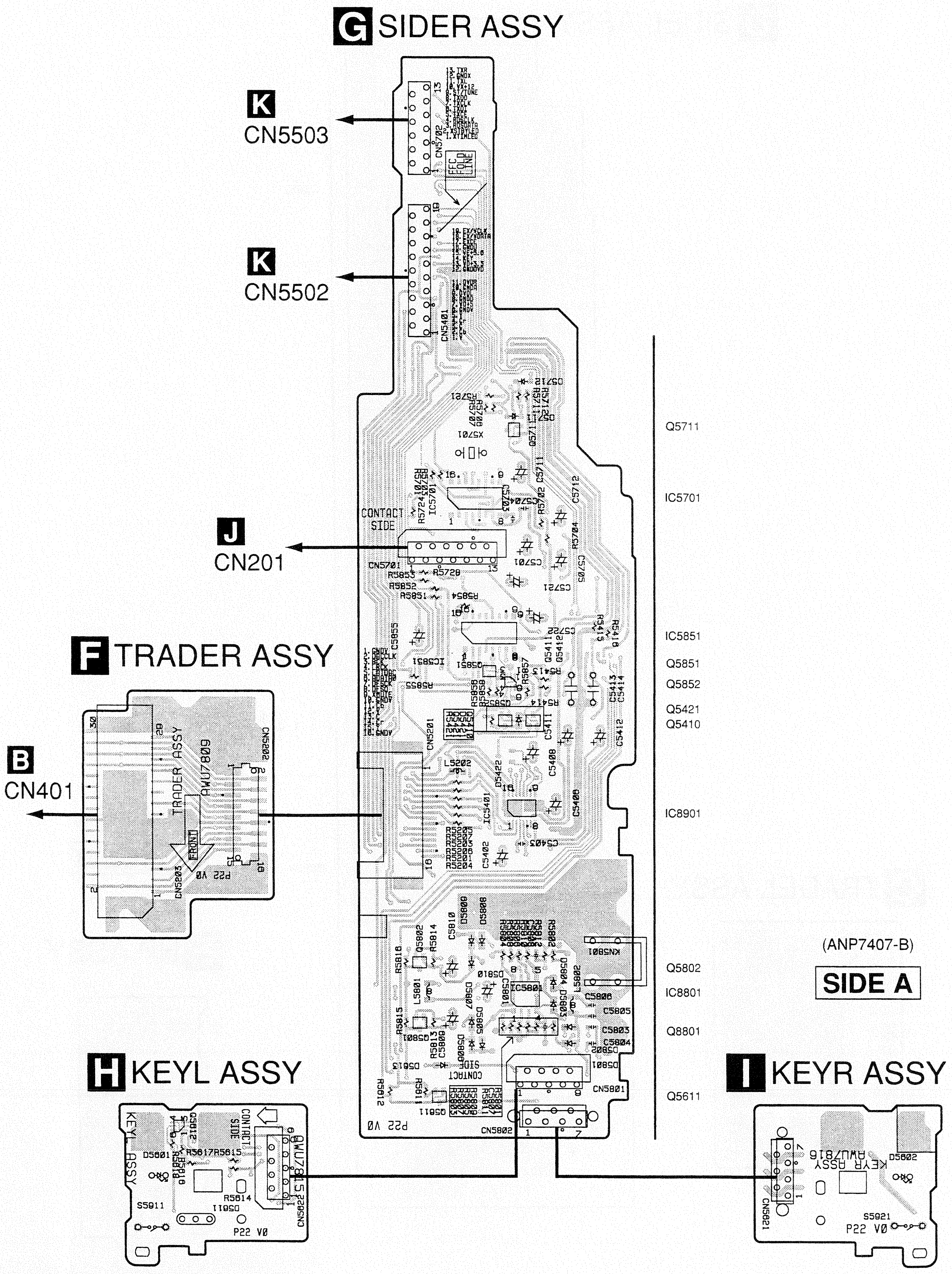
(ANP7407-B)

SIDE B

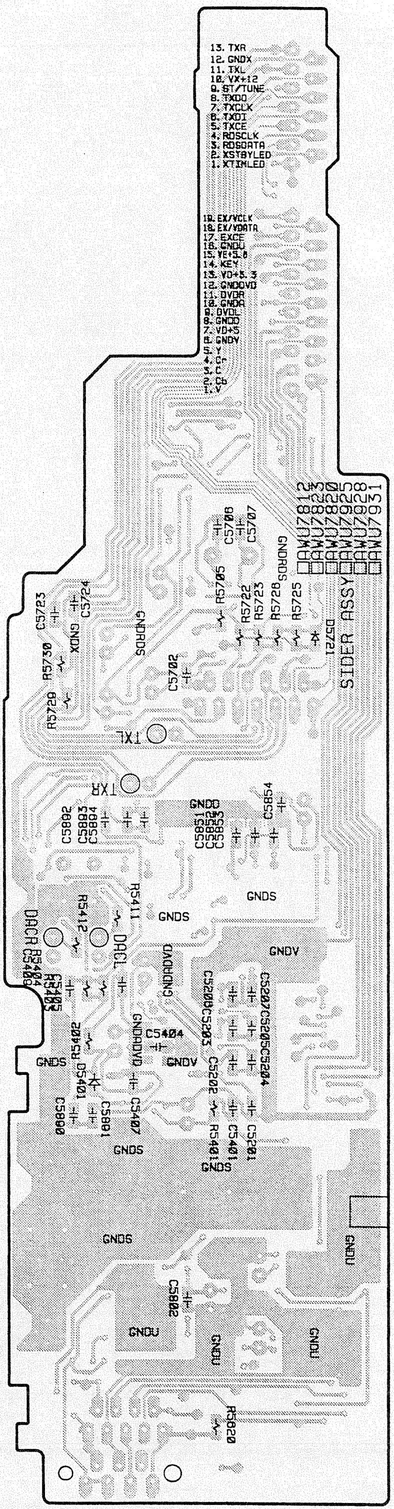
E HP ASSY


B
HPDET
GNDD
HPR
HPGND
HPL
HP ASSY
AWU7814
C8956
C8955

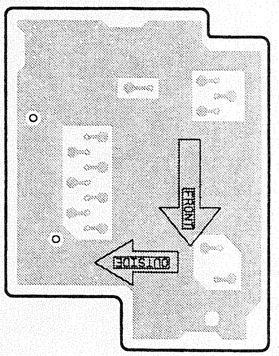
4.4 TRADER, SIDER, KEYL and KEYR ASSYS


G SIDER ASSY
K CN5503
K CN5502
J CN201
F TRADER ASSY
B CN401
H KEYL ASSY
I KEYR ASSY
CN5702
FFC FOLD LINE
CN5401
CONTACT SIDE
CN5701
IC5701
X5701
IC5851
CN5201
CN5202
CN5203
TRADER ASSY
AWU7809
FRONT
P22 V0
L5202
IC5401
IC5801
KN5801
CN5801
CN5802
KEYL ASSY
AWU7815
CN5822
S5911
D5601
KEYR ASSY
AWU7816
CN5621
S5921
D5602
Q5711
IC5701
IC5851
Q5851
Q5852
Q5421
Q5410
IC8901
Q5802
IC8801
Q8801
Q5611
(ANP7407-B)
SIDE A

G SIDER ASSY


13. TXR
12. GNDX
11. TXL
10. VX+12
9. ST/TUNE
8. TXDO
7. TXCLK
6. TXDI
5. TXCE
4. RDSCLK
3. RDSDATA
2. XSTBYLED
1. XTINLED
19. EX/VCLK
18. EX/VDATA
17. EXCE
16. GNDU
15. VE+5.6
14. KEY
13. VD+5.3
12. GNDDVD
11. DVDR
10. GNDA
9. DVDL
8. GNDD
7. VD+5
6. GNDV
5. Y
4. Cr
3. C
2. Cb
1. V
☐ AWU7812
☐ AWU7823
☐ AWU7820
☐ AWU7925
☐ AWU7928
☐ AWU7931
SIDER ASSY
C5706
C5707
GNDRDS
R5705
R5722
R5723
R5728
R5725
D5721
C5723
C5724
GNDX
R5730
R5729
GNDRDS
C5702
TXL
TXR
C5802
C5803
C5804
GNDD
C5851
C5852
C5853
C5854
GNDS
R5411
R5412
DACR
DACL
R5404
C5409
R5405
R5403
GNDS
GNDV
GNDADVD
C5208
C5203
C5207
C5205
C5204
C5404
GNDADVD
GNDV
C5202
R5402
D5401
GNDS
C5800
C5801
C5407
R5401
C5401
C5201
GNDS
GNDS
GNDS
GNDU
C5802
GNDU
GNDU
GNDU
R5620

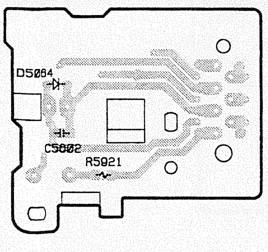
F TRADER ASSY


FRONT
OUTSIDE

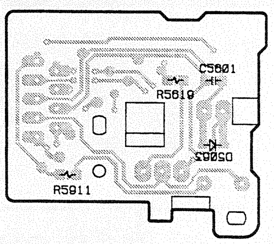
(ANP7407-B)

SIDE B

I KEYR ASSY

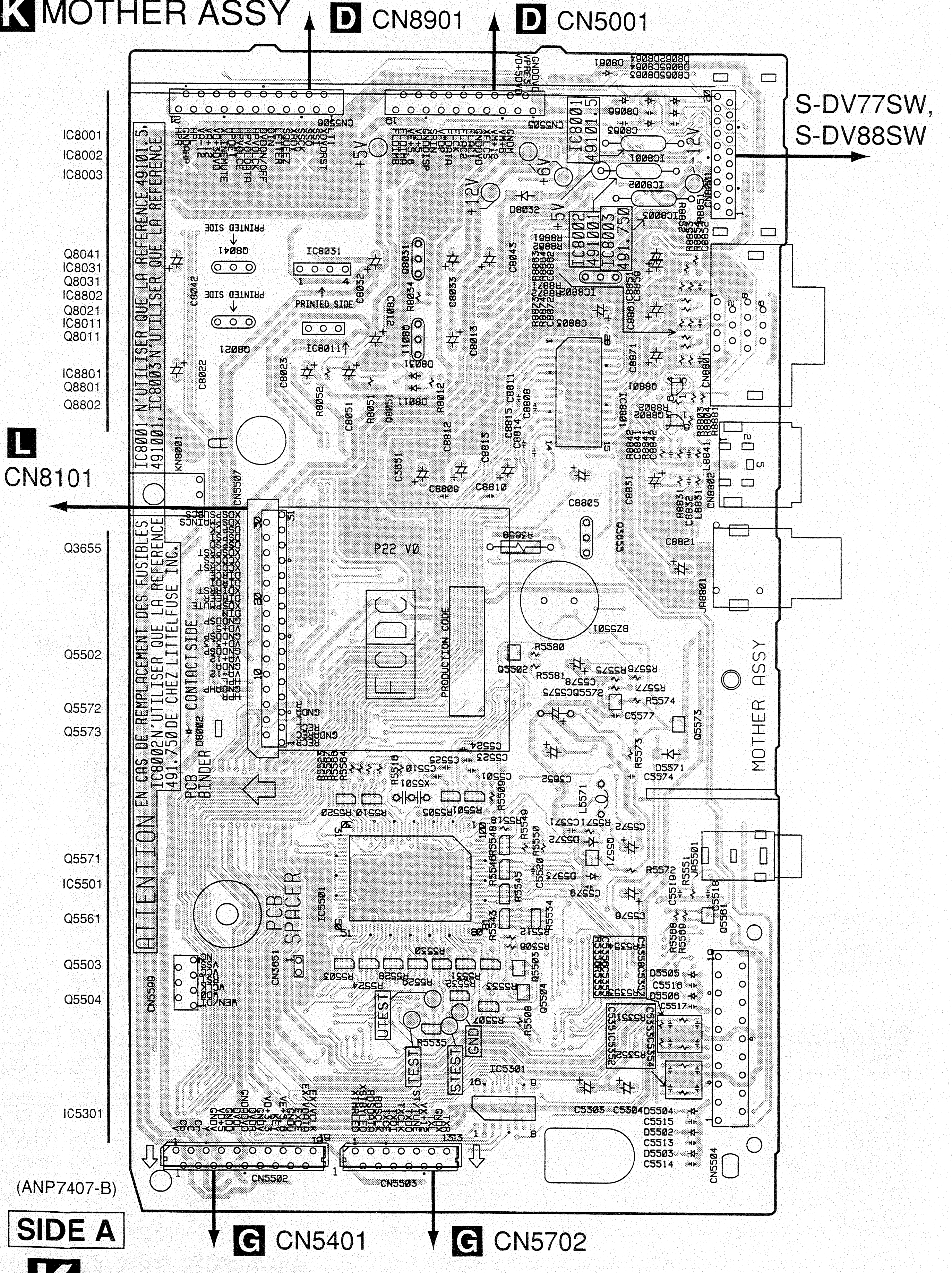

D5064
C5002
R5921

H KEYL ASSY


C5001
R5619
D5083
R5911

4.5 MOTHER ASSY

K MOTHER ASSY

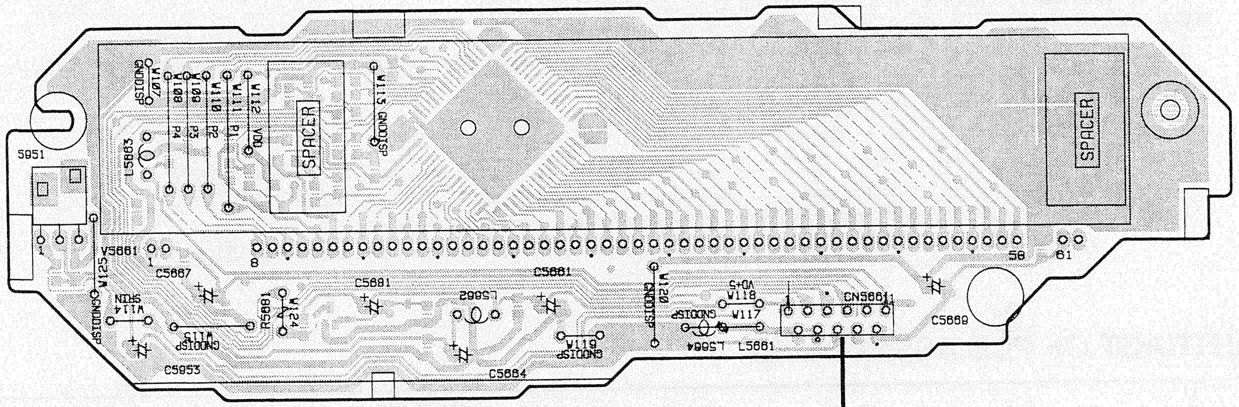

D CN8901
D CN5001
S-DV77SW,
S-DV88SW
L CN8101
G CN5401
G CN5702
IC8001
IC8002
IC8003
Q8041
IC8031
Q8031
IC8802
Q8021
IC8011
Q8011
IC8801
Q8801
Q8802
Q3655
Q5502
Q5572
Q5573
Q5571
IC5501
Q5561
Q5503
Q5504
IC5301
CN5506
CN5505
CN5507
CN5509
CN5502
CN5503
CN5504
CN8801
CN8802
JA8801
JA5501
KN8001
IC8001 N'UTILISER QUE LA REFERENCE 49101.5, 491001, IC8003 N'UTILISER QUE LA REFERENCE
ATTENTION EN CAS DE REMPLACEMENT DES FUSIBLES IC8002N'UTILISER QUE LA REFERENCE 491.750DE CHEZ LITTELFUSE INC.
CONTACT SIDE
PCB BINDER
PCB SPACER
PRINTED SIDE
P22 V0
FCDC
PRODUCTION CODE
MOTHER ASSY
+5V
+6V
+12V
-12V
TEST
UTEST
STEST
GND
IC5301
BZ5501

(ANP7407-B)

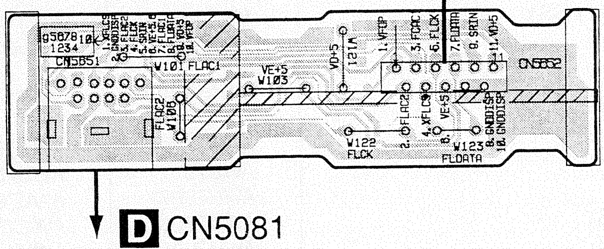
SIDE A

4.9 CNB and FLDP ASSYS

P FLDP ASSY


SPACER
SPACER
5951
V5661
C5667
C5681
C5682
C5953
C5684
C5669
CN5661
L5661
L5664
L5662
R5681
W125
W107
W108
W109
W110
W111
W112
W113
W114
W115
W117
W118
W119
W120
W124
GNDDISP
VDD
P1
P2
P3
P4
SHIN
VD+5
1
8
58
61

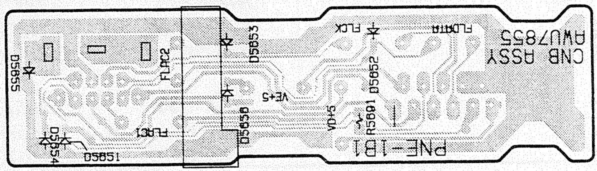
O CNB ASSY


D5678
1234
CN5851
1.XFLCS
2.GNDDISP
3.FLAC2
4.FLCK
5.SRIN
6.VE+5
7.FLAC1
8.FLDATA
9.VDH5
10.VFDP
W101 FLAC1
FLAC2
W100
VE+5
W103
VD+5
W121
1.VFDP
3.FCAC
5.FLCK
7.FLDATA
9.SRIN
11.VDH5
CN5852
2.FLAC2
4.XFLCS
6.VE+5
8.GNDDISP
10.GNDDISP
W122 FLCK
W123 FLDATA
D CN5081

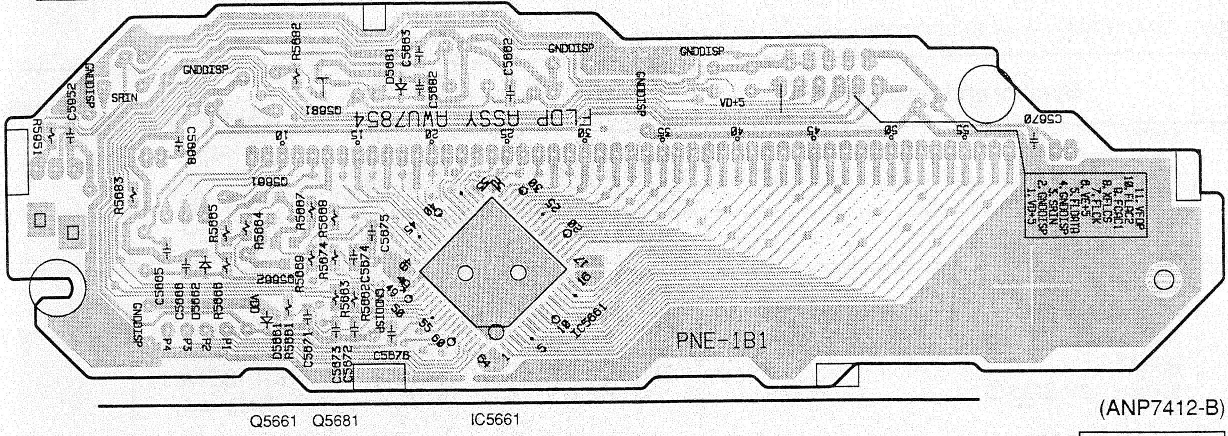
(ANP7412-B)

SIDE A

O CNB ASSY


AWU7855
CNB ASSY
PNE-1B1
D5855
D5854
D5851
D5853
D5850
D5852
R5881
FLAC2
FLAC1
FLCK
FLDATA
VE+5
VDH5

P FLDP ASSY


FLDP ASSY AWU7854
PNE-1B1
GNDDISP
SRIN
VD+5
IC5661
C5670
C5952
R5951
R5683
C5669
C5665
C5666
D5662
R5668
R5665
R5684
R5687
R5688
R5674
R5669
R5663
R5661
D5661
C5671
C5673
C5672
C5676
C5674
C5675
R5662
D5681
C5683
C5682
C5602
R5682
D5601
D5600
VDD
P1
P2
P3
P4
1.VDH5
2.GNDDISP
3.SRIN
4.GNDDISP
5.FLDATA
6.VE+5
7.FLCK
8.XFLCS
9.FCAC1
10.FLAC2
11.VFDP
Q5661 Q5681 IC5661

(ANP7412-B)

SIDE B

O **P**

5. PCB PARTS LIST

NOTES: ●*The* ⚠ *mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*

●*When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560 Ω → 56×10^1 → 561 .... RD1/4PU $\boxed{5}\boxed{6}\boxed{1}$ J
47k Ω → 47×10^3 → 473 .... RD1/4PU $\boxed{4}\boxed{7}\boxed{3}$ J
0.5 Ω → R50 .... RN2H $\boxed{R}\boxed{5}\boxed{0}$ K
1 Ω → 1R0 .... RS1P $\boxed{1}\boxed{R}\boxed{0}$ K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω → 562×10^1 → 5621 .... RN1/4PC $\boxed{5}\boxed{6}\boxed{2}\boxed{1}$ F

■ CONTRAST OF PCB ASSEMBLIES

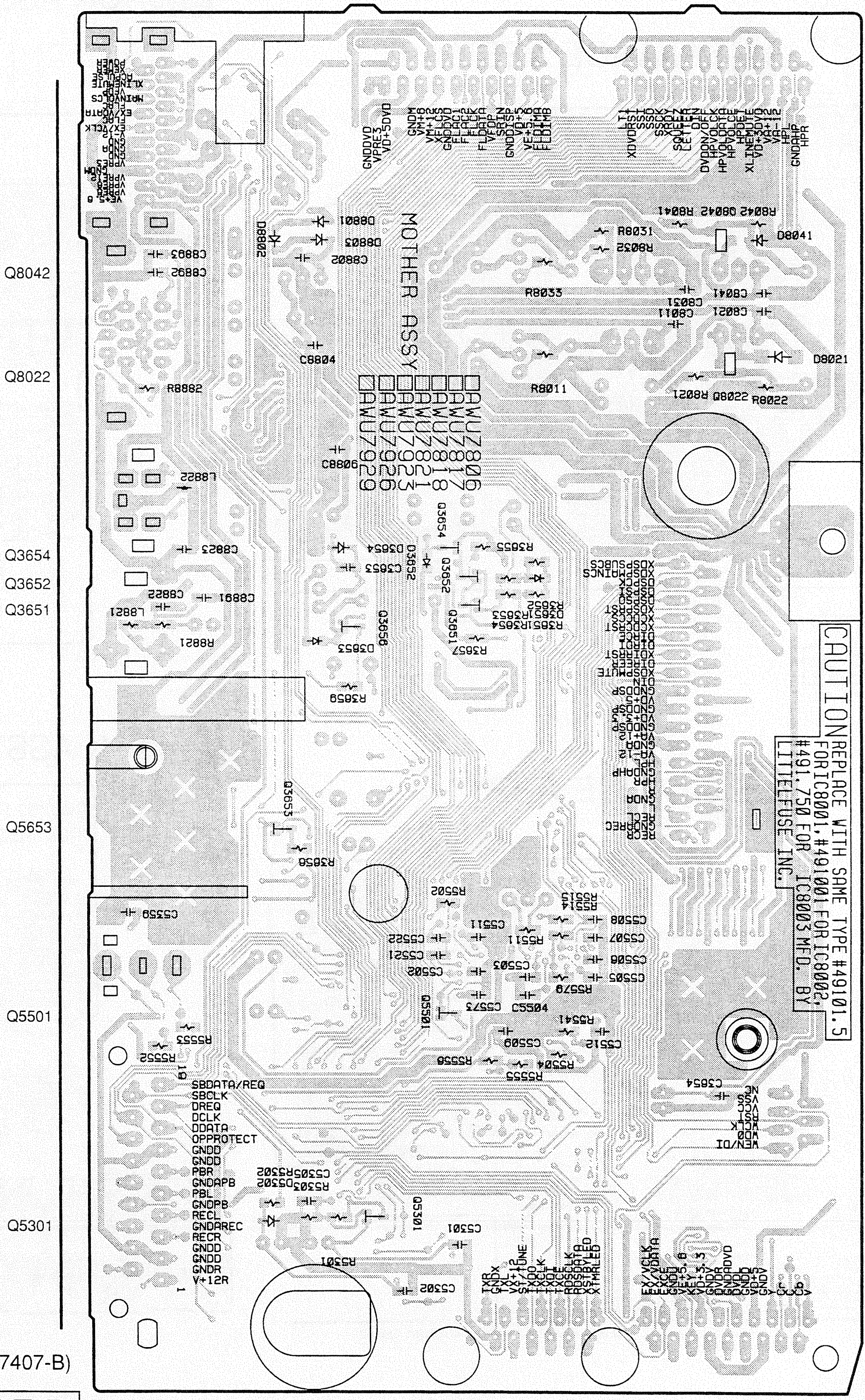
Mark	Symbol and Description	Part No.			Remarks
		XV-DV88 ZVYXJ	XV-DV77 ZVYXJ	XV-DV77 ZUCXJ	
	FM/AM TUNER MODULE	AXQ7229	AXQ7229	AXQ7228	
NSP	Loading Mechanism ASSY	VWT1188	VWT1188	VWT1188	
NSP	└ LOAB ASSY	VWG2279	VWG2279	VWG2279	
	DVDM ASSY	VWS1496	VWS1496	VWS1496	
NSP	DVD COMP ASSY	AWM7622	AWM7621	AWM7623	
	├ MOTHER ASSY	AWU7817	AWU7806	AWU7818	
NSP	├ DSP ASSY	AWU7807	AWU7807	AWU7819	
	├ BALANCE ASSY	AWU7808	AWU7808	AWU7808	
	├ TRADER ASSY	AWU7809	AWU7809	AWU7809	
	├ TRADEL ASSY	AWU7810	AWU7810	AWU7810	
	├ JACK ASSY	AWU7811	AWU7811	AWU7811	
	├ SIDER ASSY	AWU7812	AWU7812	AWU7820	
	├ SIDEL ASSY	AWU7813	AWU7813	AWU7813	
	├ HP ASSY	AWU7814	AWU7814	AWU7814	
	├ KEYL ASSY	AWU7815	AWU7815	AWU7815	
	└ KEYR ASSY	AWU7816	AWU7816	AWU7816	
NSP	DISPLAY ASSY	AWM7633	AWM7633	AWM7633	
	├ FLDP ASSY	AWU7854	AWU7854	AWU7854	
	└ CNB ASSY	AWU7855	AWU7855	AWU7855	

K MOTHER ASSY

AWU7817, AWU7806 and AWU7818 are constructed the same except for the following :

Mark	Symbol and Description	Part No.			Remarks
		AWU7817	AWU7806	AWU7818	
	Q5561	2SC4081	2SC4081	Not used	
	D5502–D5506	UDZS8.2B	UDZS8.2B	Not used	
	C5351–C5358	CCSRCH101J50	CCSRCH101J50	Not used	
	C5518	CKSRYB103K50	CKSRYB103K50	Not used	
	R5351–R5354	RS1/16S101J	RS1/16S101J	Not used	
	R5551	RS1/16S223J	RS1/16S223J	Not used	
	R5552, R5553	RS1/16S0R0J	RS1/16S0R0J	Not used	
	R5566	RS1/16S103J	RS1/16S473J	RS1/16S333J	
	R5567	RS1/16S393J	Not used	RS1/16S223J	
	5504 19P SOCKET	AKP7001	AKP7001	Not used	
	JA5501 STEREO MINI JACK	DKN1124	DKN1124	Not used	

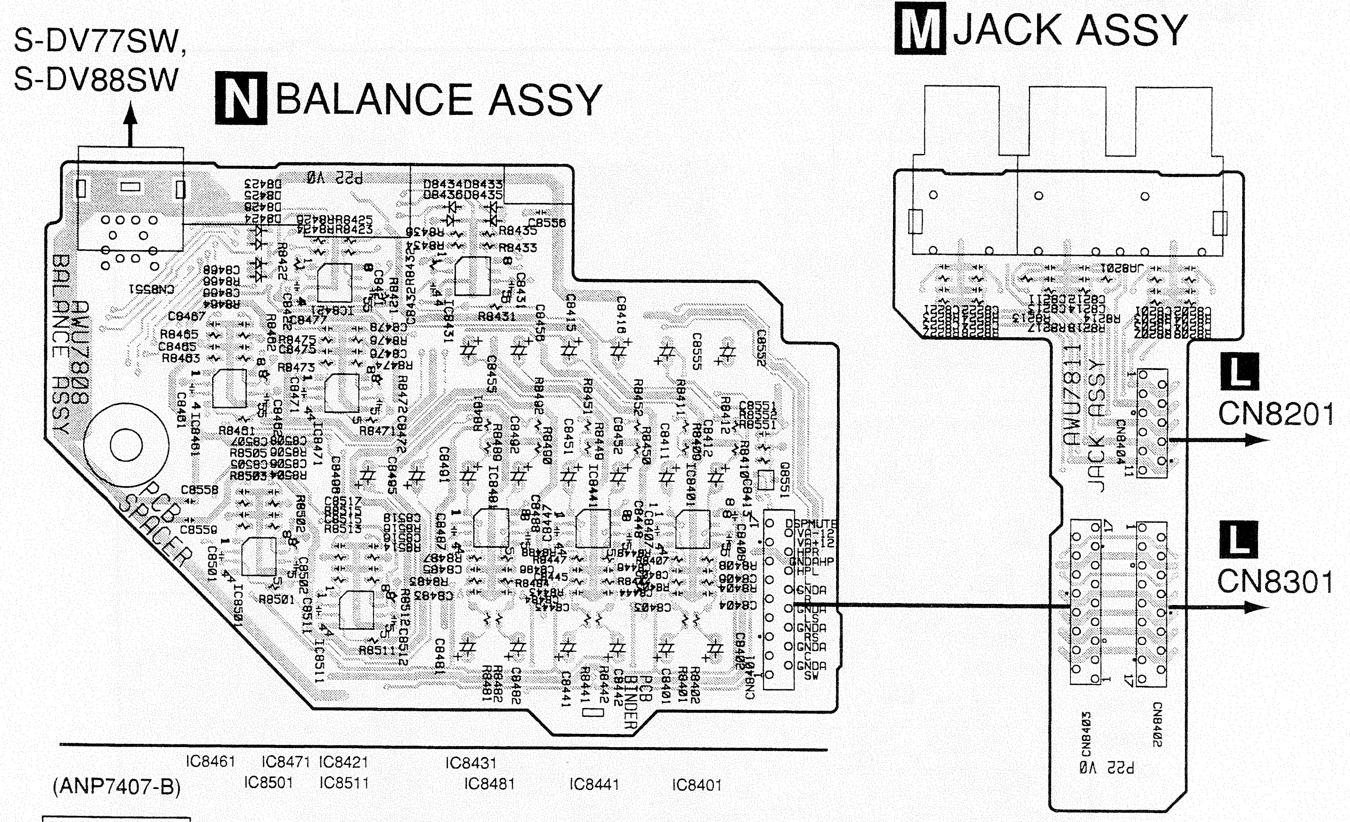
K MOTHER ASSY


Q8042
Q8022
Q3654
Q3652
Q3651
Q5653
Q5501
Q5301
MOTHER ASSY
AWU7806
AWU7817
AWU7818
AWU7821
AWU7823
AWU7926
AWU7929
CAUTION REPLACE WITH SAME TYPE #49101.5 FOR IC8001, #49101 FOR IC8002, #491.750 FOR IC8003 MFD. BY LITTELFUSE INC.
SBDATA/REQ
SBCLK
DREQ
DCLK
DDATA
OPPROTECT
GNDD
GNDD
PBR
GNDAPB
PBL
GNDPB
RECL
GNDAREC
RECR
GNDD
GNDR
V+12R
A
B
C
D

(ANP7407-B)

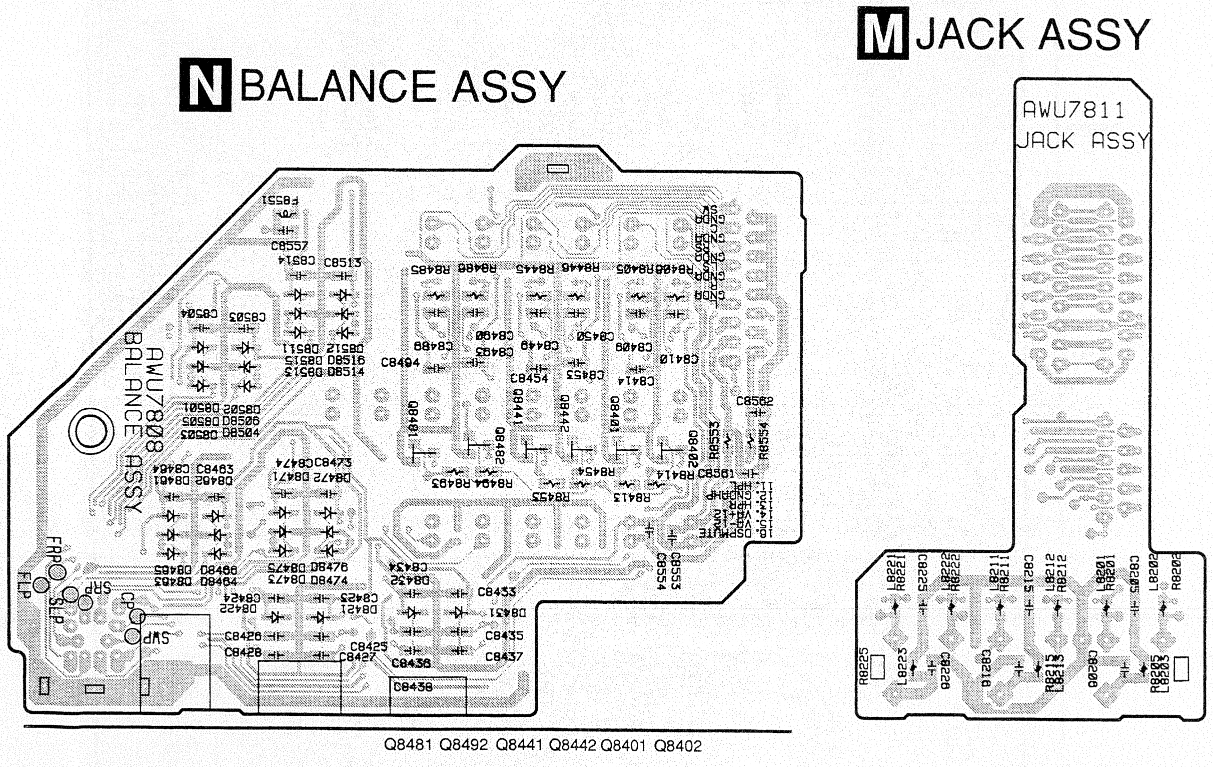
SIDE B

4.6 JACK and BALANCE ASSYS


S-DV77SW,
S-DV88SW
N BALANCE ASSY
M JACK ASSY
AWU7808 BALANCE ASSY
PCB SPACER
PCB BINDER
CN8551
P22 V0
AWU7811 JACK ASSY
L CN8201
L CN8301
CN8403
CN8402
DSPMUTE
VA-12
VA+12
HPR
GNDAHP
HPL
GNDA
SW
IC8461
IC8471
IC8421
IC8431
IC8501
IC8511
IC8481
IC8441
IC8401

(ANP7407-B)

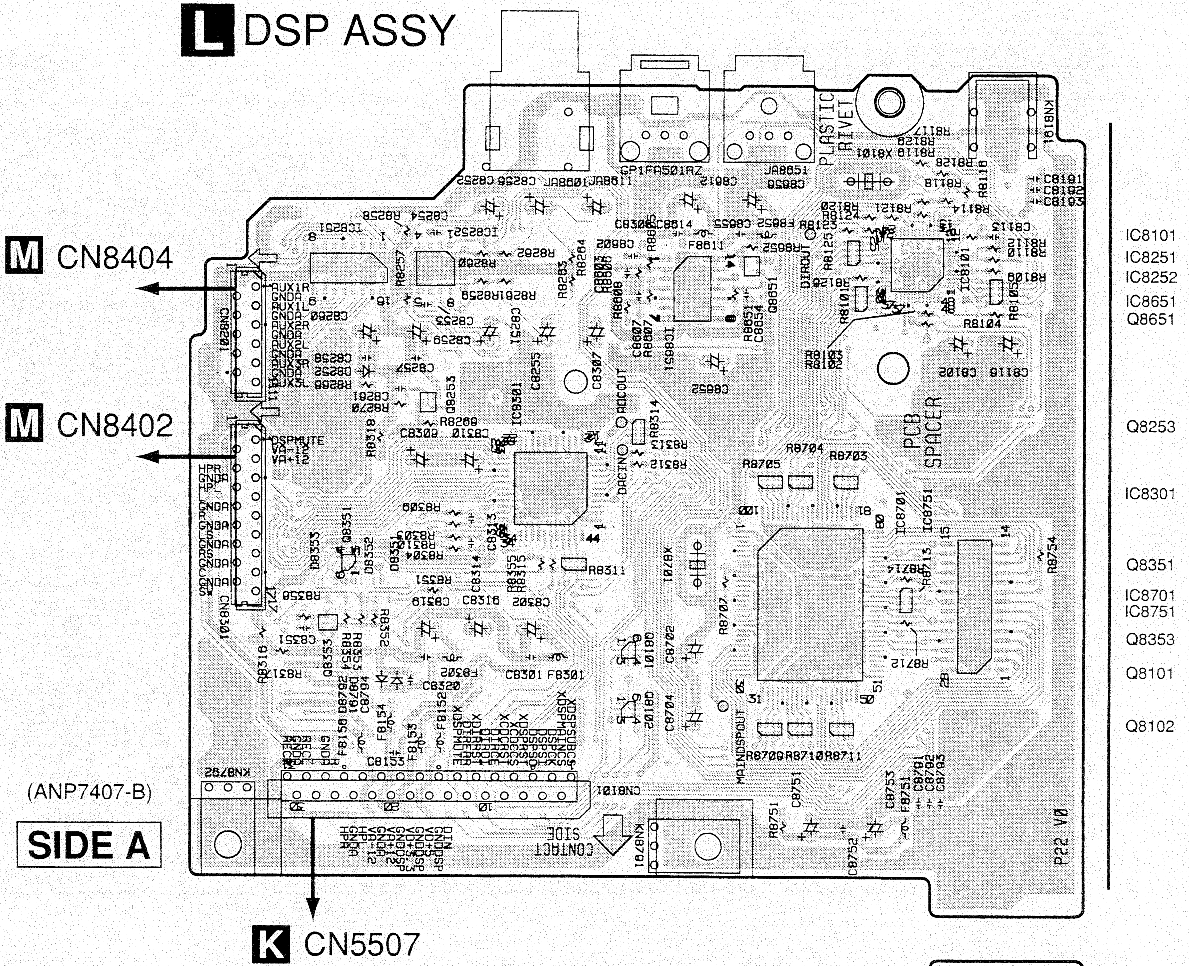
SIDE A


M JACK ASSY
N BALANCE ASSY
AWU7811 JACK ASSY
AWU7808 BALANCE ASSY
FRP
FLP
SRP
SLP
CP
SWP
Q8481
Q8492
Q8441
Q8442
Q8401
Q8402

(ANP7407-B)

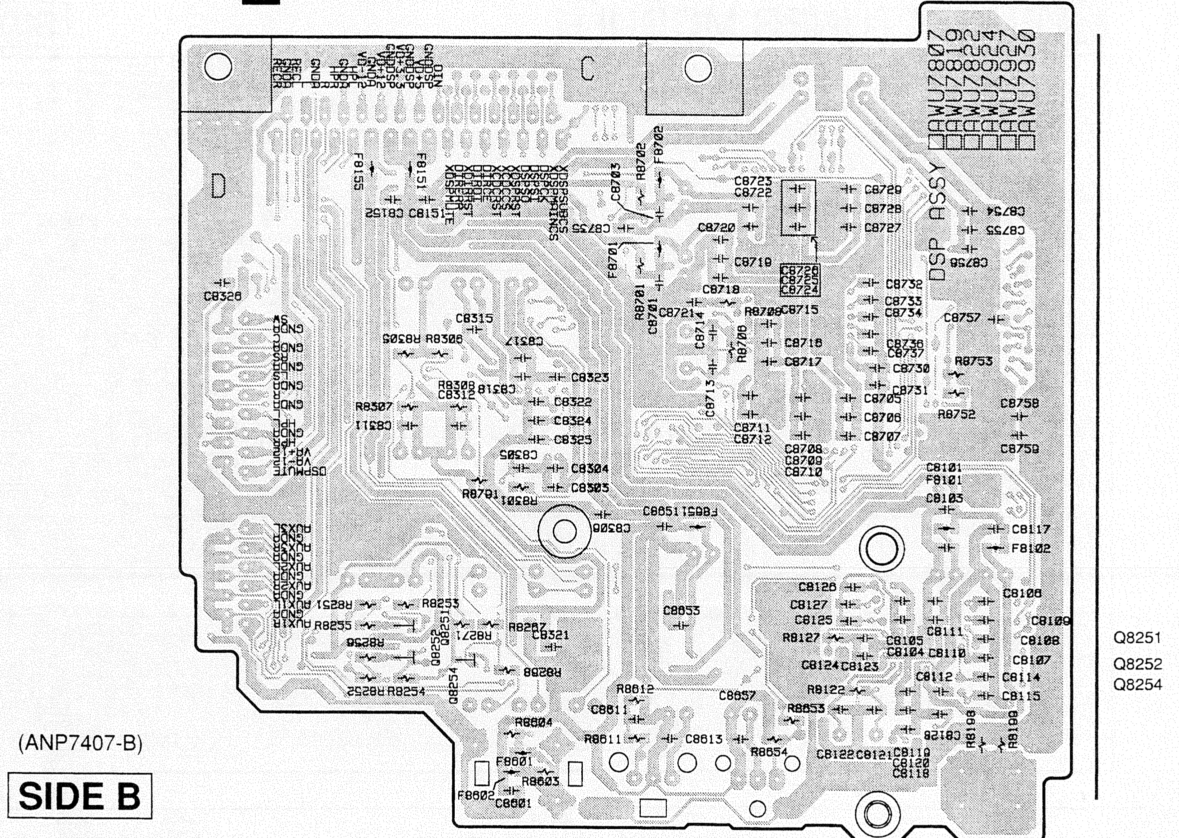
SIDE B

4.7 DSP ASSY


L DSP ASSY
M CN8404
M CN8402
K CN5507
CN8201
CN8301
CN8101
KN8702
KN8701
CONTACT SIDE
PLASTIC RIVET
PCB SPACER
P22 V0
IC8101
IC8251
IC8252
IC8651
Q8651
Q8253
IC8301
Q8351
IC8701
IC8751
Q8353
Q8101
Q8102

(ANP7407-B)

SIDE A


DSP ASSY
AWU7807
AWU7819
AWU7924
AWU7927
AWU7930
Q8251
Q8252
Q8254

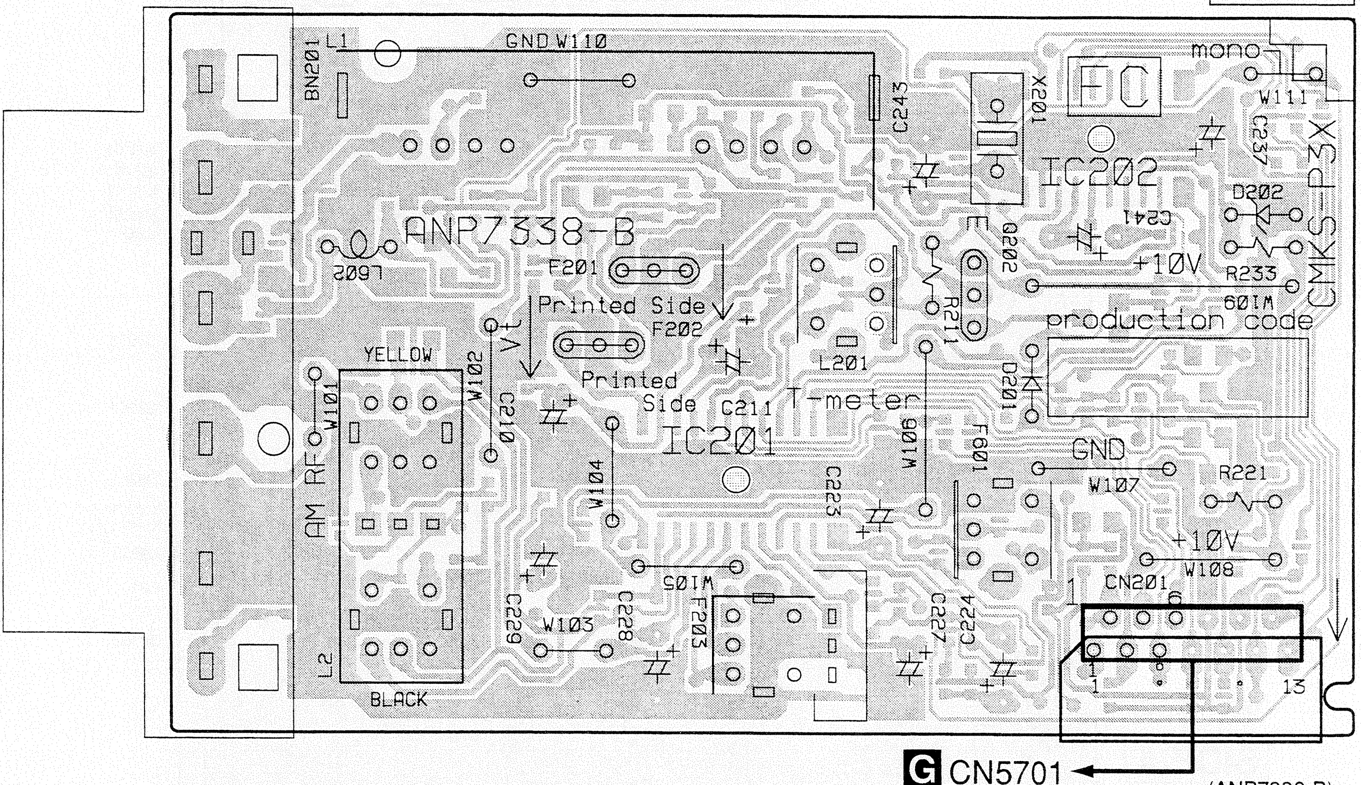
(ANP7407-B)

SIDE B

4.8 FM/AM TUNER MODULE

J FM/AM TUNER MODULE

SIDE A

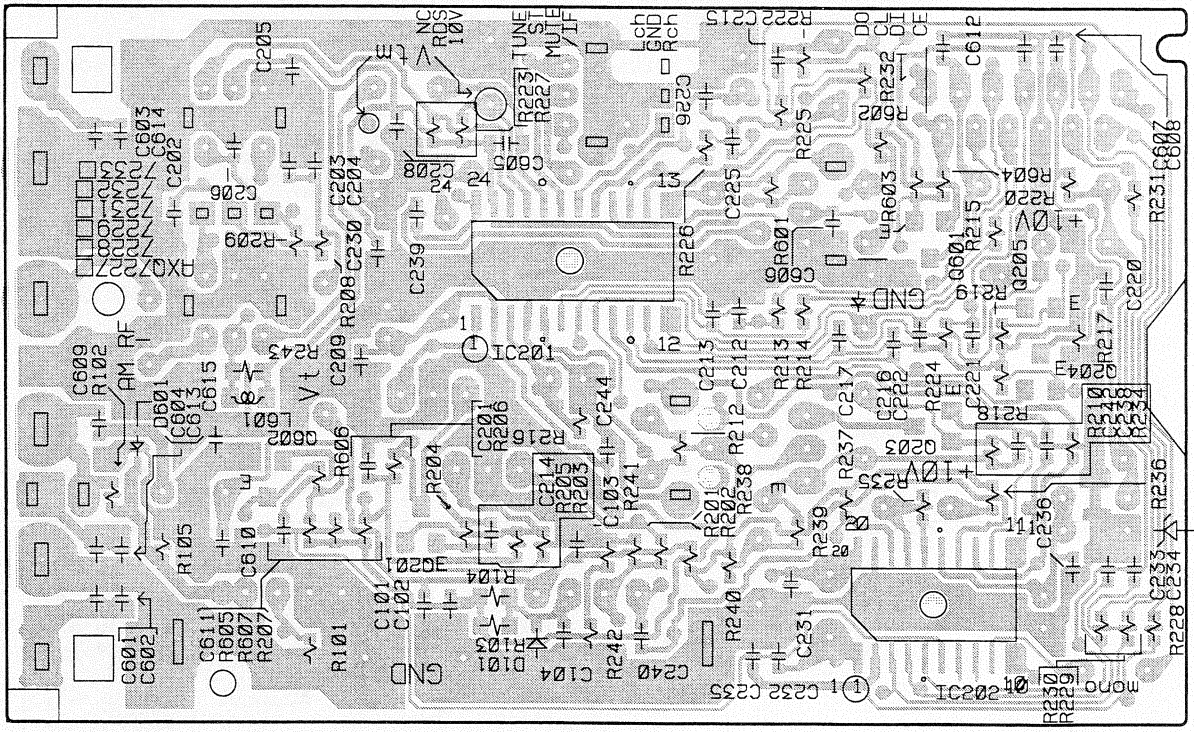

BN201
L1
GND W110
C243
X201
FC
mono
W111
C237
CMKS-P3X
IC202
D202
C241
Q202
+10V
R233
601M
production code
ANP7338-B
L602
F201
Printed Side
F202
Vt
YELLOW
W102
C210
W101
AM RF
Printed Side
C211
IC201
T-meter
L201
R211
D201
W106
L601
GND
W107
R221
W104
C223
+10V
W108
CN201
1
6
13
W105
C229
W103
C228
F203
C227
C224
L2
BLACK
G CN5701

(ANP7338-B)

Q202

J FM/AM TUNER MODULE

SIDE B


C205
NC
RDS
10V
Vt
TUNE
ST
MUTE
/IF
Lch
GND
Rch
R222 C215
DO
CL
DI
CE
C612
R223
R227
C226
R602
R232
C603
C614
C202
C208
24
C605
13
C225
R225
C607
C608
R604
R220
+10V
R231
C206
C203
C204
R209
R226
R603
AX0722
C230
R208
C239
R601
C606
GND
Q601
R215
Q205
R219
C220
E
R217
1
IC201
12
C213
C212
R213
R214
C217
C216
C222
R224
C221
Q204
R210
C609
R102
AM RF
D601
C604
C613
C615
R243
C209
L601
Q602
R606
C201
R206
R216
C244
R218
R237
Q203
R235
+10V
R236
C214
R205
R203
R204
C103
R241
R212
R201
R202
R238
R239
20
11
C236
R105
C610
Q201
E
R104
C233
C234
C611
R605
R607
R207
R101
C101
C102
D101
R103
C104
R242
C240
R240
C231
C232 C235
1
IC202
10
R230
R229
mono
R228
C601
C602
GND

(ANP7338-B)

Q201 IC201 Q203 IC202 Q205 Q204

G SIDER ASSY

AWU7812 and AWU7820 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWU7812	AWU7820	
	IC5401	PCM1742KE	Not used	
	IC5701	BU1923F	Not used	
	Q5410	DTA124EUA	Not used	
	Q5411, Q5412	2SD2114K	Not used	
	Q5421	UN5212	Not used	
	D5401	UDZ4.7B	Not used	
	D5421	1SS355	Not used	
	D5422	DAN202K	Not used	
	C5402	CEJQ101M6R3	Not used	
	C5404, C5407, C5704	CKSRYB103K50	Not used	
	C5406	CEAT221M6R3	Not used	
	C5408	CEJQ470M6R3	Not used	
	C5411, C5412	CEAT470M16	Not used	
	C5413, C5414	CQMA222J50	Not used	
	C5701	CEJQ100M16	Not used	
	C5702	CKSRYB271K50	Not used	
	C5703	CKSRYB561K50	Not used	
	C5706, C5707	CCSRCH270J50	Not used	
	R5201, R5204, R5705	RS1/16S101J	Not used	
	R5202	RS1/10S220J	Not used	
	R5203, R5401, R5704	RS1/16S0R0J	Not used	
	R5205–R5207, R5411, R5412	RS1/16S102J	Not used	
	R5413, R5414	RS1/16S222J	Not used	
	R5421	RS1/16S103J	Not used	
	R5701	Not used	RS1/16S473J	
	R5702, R5703	Not used	RS1/16S103J	
	X5701 CRYSTAL RESONATOR (4.332MHz)	ASS7004	Not used	

L DSP ASSY

AWU7807 and AWU7819 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWU807	AWU7819	
	F8611	VTF1096	Not used	
	C8612	CEAT470M16	Not used	
	C8613, C8614	CKSRYB473K25	Not used	
	R8611	RS1/16S102J	Not used	
	JA8611 OPT. LINK IN 8MB/S	GP1FA501RZ	Not used	

■ PCB PARTS LIST FOR XV-DV88/ZVYXJ UNLESS OTHERWISE NOTED

A LOAB ASSY

SWITCH

Mark	No.	Description	Part No.
	S101		VSK1011

OTHERS

Mark	No.	Description	Part No.
	CN602	KR CONNECTOR	S2B-PH-K
	CN601	KR CONNECTOR	S5B-PH-K
		PC BOARD LOAB	VNP1836

B DVDM ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC861		ADV7172KST
	IC261, IC302		BA4510F
	IC251		BA6664FM
	IC481		BU2288FV
	IC101		LA9701M

Mark	No.	Description	Part No.
	IC201		LC78652W
	IC351		M56788AFP
	IC801		M65774BFP
	IC805		MB81F161622C-80FN
	IC712		MNR4800DJ7
	IC601		PD6345A
	IC701		PE5108A
	IC111		TC74HC4053AFT
	IC612		TC74VHC125FT
	IC608		TC74VHCT125AFT
	IC304		TC7SHU04F
	IC603	FLASH ROM	VYW1852
	Q109, Q901–Q903, Q911–Q913		2SA1576A
	Q114, Q130		2SC4081
	Q107, Q111, Q115, Q241		DTC114EUA
	Q101, Q102, Q106		HN1A01F
	Q103, Q141, Q142, Q542, Q543		HN1B04FU
	Q112, Q113		HN1C01FU
	Q108		HN1K03FU
	Q571		RN1911
	Q117, Q171, Q601		RN4982
	D302		KV1470
	D601		RB501V-40

COILS AND FILTERS

Mark	No.	Description	Part No.
	L304		LCYA1R5J2520
	L490	CHIP BEADS	VTL1073
	L481	CHIP BEADS	VTL1084

CAPACITORS

Mark	No.	Description	Part No.
	C480, C481, C612		CCSRCH100D50
	C152		CCSRCH101J50
	C104–C108		CCSRCH150J50
	C322		CCSRCH180J50
	C314		CCSRCH220J50
	C151		CCSRCH270J50
	C391, C392		CCSRCH331J50
	C146		CCSRCH390J50
	C122, C123		CCSRCH391J50
	C116, C134, C297		CCSRCH470J50
	C824, C826		CCSRCH471J50
	C145, C241		CCSRCH560J50
	C117, C360		CCSRCH681J50
	C124		CCSRCH820J50
	C129, C142, C149, C201, C205		CEV101M16
	C358, C368, C369, C403, C410		CEV101M16
	C472, C864		CEV101M16
	C113, C139		CEV220M16
	C405, C409, C715		CEV221M4
	C254, C401		CEV470M16
	C111		CEV470M6R3
	C140, C223, C224, C264, C312		CKSQYB105K10
	C475–C477		CKSQYB105K10
	C209, C211, C216, C313, C351		CKSRYB102K50
	C133, C136, C203, C220, C225		CKSRYB103K50
	C239, C261, C320, C321, C330		CKSRYB103K50
	C591, C619, C703, C722		CKSRYB103K50
	C101, C103, C118, C119, C121		CKSRYB104K16
	C212, C213, C227, C231		CKSRYB104K16
	C248–C251, C255, C263, C315		CKSRYB104K16

Mark	No.	Description	Part No.
	C317		CKSRYB104K16
	C208, C210		CKSRYB222K50
	C266		CKSRYB224K10
	C206, C214, C242, C357		CKSRYB472K50
	C102, C109, C120, C130, C131		CKSRYF104Z25
	C138, C143, C148, C154		CKSRYF104Z25
	C157, C158, C204, C207, C215		CKSRYF104Z25
	C221, C222, C226, C230, C236		CKSRYF104Z25
	C253, C256, C258, C265, C299		CKSRYF104Z25
	C319, C332, C353, C359		CKSRYF104Z25
	C365, C366, C603, C606		CKSRYF104Z25
	C608–C611, C613, C615, C618		CKSRYF104Z25
	C626, C628, C631, C704, C706		CKSRYF104Z25
	C708, C712, C713, C716–C718		CKSRYF104Z25
	C721, C723, C725, C743, C802		CKSRYF104Z25
	C808, C811, C814, C866		CKSRYF104Z25
	C869–C872, C874, C875, C903		CKSRYF104Z25
	C913		CKSRYF104Z25
	C115, C217, C328, C614, C711		CKSRYF105Z10
	C726, C801, C809, C813		CKSRYF105Z10
	C816–C821, C827, C833, C843		CKSRYF105Z10

RESISTORS

Mark	No.	Description	Part No.
	R815, R819		RAB4C0R0J
	R543, R545, R594, R631, R707		RAB4C103J
	R121		RAB4C220J
	R123		RAB4C470J
	R400, R403		RS1/10S0R0J
	R341		RS1/10S101J
	R126–R129, R176–R179		RS1/10S220J
	R902, R905, R908, R912, R915		RS1/16S1000F
	R918		RS1/16S1000F
	R364, R369, R373, R375		RS1/16S1003F
	R865		RS1/16S1502F
	R358, R361		RS1/16S1503F
	R876, R878		RS1/16S4701F
	R866		RS1/16S4702F
	R870, R875		RS1/16S6800F
	R867		RS1/16S6801F
	R357, R362, R363, R368, R372		RS1/16S6802F
	R374		RS1/16S6802F
	R257 (1Ω)		VCN1127
	R258, R259 (2.2Ω)		VCN1128
	Other Resistors		RS1/16S□□□J

OTHERS

Mark	No.	Description	Part No.
	CN15, CN401	B TO B PLUG 30P	AKP7168
	CN3	4P CONNECTOR	DKN1223
	CN52	PH CONNECTOR	S5B-PH-SM3
	9007	FLEXIBLE CABLE (07P)	VDA1681
	CN120	FFC CONNECTOR	VKN1787
	CN251	12P CONNECTOR	VKN1795
	X481	CRYSTAL RESONATOR (27.000MHz)	VSS1159
	X601	CERAMIC RESONATOR (16.5MHz)	VSS1160

C TRADEL ASSY

OTHERS

Mark	No.	Description	Part No.
	CN5104	B TO B SOCKET 30P	AKP7163
	CN5103	B TO B SOCKET 28P	AKP7165

D SIDEL ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC5001, IC5002		BA033FP
	IC5101		BA25BC0FP
	IC8902		BA4558F-HT
	IC8901		LC75366M
	IC8921		NJM4560M
	Q8942		2SA1576A
	Q5001, Q5054		2SB1237X
	Q5053, Q5201		2SC4081
	Q8921–Q8924		2SD2114K
	Q8941		DTA124EUA
	Q5051		RN2903
	D5001–D5003, D5051, D5052, D8901		1SS355
	D5053		UDZS6.8B
	D5081–D5084		UDZS8.2B

COILS AND FILTERS

	F5082	CHIP BEAD	DTF1069
	L5087		LCYA220J2520

CAPACITORS

	C5083–C5085, C5105		CCSRCH101J50
	C8923, C8924		CCSRCH470J50
	C5107, C5108		CCSRCH471J50
	C5052, C8901–C8906, C8925, C8926		CEAT100M50
	C8931, C8932		CEAT100M50
	C5001, C5003, C5081		CEAT101M10
	C8921, C8922		CEAT1R0M50
	C5051, C5251, C8941		CEAT220M50
	C8910		CEAT470M16
	C5005, C8908		CEAT471M6R3
	C5101		CEJQ101M6R3
	C5002, C5004, C8907, C8909		CKSRYB103K50
	C8927, C8928		CKSRYB221K50
	C5102–C5104		CKSRYB473K50
	C5082, C8942		CKSRYF104Z50

RESISTORS

	R5060		RAB4C273J
	Other Resistors		RS1/16S□□□J

OTHERS

	CN5001	19P SOCKET	AKP7073
	CN8901	21P SOCKET	AKP7074
	CN5081	10P CONNECTOR	AKP7134
	CN5101	B TO B PLUG 28P	AKP7167
	CN5102	7P CONNECTOR	VKN1267

E HP ASSY

CAPACITORS

	C8951, C8952		CKSRYB102K50
	C8953, C8954		CKSRYB223K50
	C8955, C8956		CKSRYF104Z50

RESISTORS

	All Resistors		RS1/16S□□□J

OTHERS

Mark	No.	Description	Part No.
	8952	5P CABLE HOLDER	51048-0500
	8951	MINI JACK	AKN7026
	J 8901	JUMPER WIRE	D20PYY0510E
	KN8951	EARTH METAL FITTING	VNF1084

F TRADER ASSY

OTHERS

	CN5203	B TO B SOCKET 30P	AKP7163
	CN5202	B TO B SOCKET 16P	AKP7164

G SIDER ASSY

SEMICONDUCTORS

	IC5701		BU1923F
	IC5851		BU4094BCF
	IC5801		NJM062M
	IC5401		PCM1742KE
	Q5611, Q5711		2SC4081
	Q5411, Q5412		2SD2114K
	Q5410, Q5851		DTA124EUA
	Q5801, Q5802		DTC114TUA
	Q5852		RN2903
	Q5421		UN5212
	D5421, D5613, D5712, D5721		1SS355
	D5801–D5810		1SS355
	D5422		DAN202K
	D5711		UDZ11B
	D5401		UDZ4.7B

COILS AND FILTERS

	L5801		LCYA220J2520

CAPACITORS

	C5807, C5808		CCSRCH102J50
	C5201–C5203		CCSRCH221J50
	C5706, C5707		CCSRCH270J50
	C5851–C5853		CCSRCH470J50
	C5406		CEAT221M6R3
	C5411, C5412, C5705		CEAT470M16
	C5701, C5711, C5721, C5722		CEJQ100M16
	C5402		CEJQ101M6R3
	C5801		CEJQ470M10
	C5408, C5855		CEJQ470M6R3
	C5809, C5810		CEJQ4R7M50
	C5894		CKSRYB102K50
	C5404, C5407, C5704, C5802–C5804		CKSRYB103K50
	C5702		CKSRYB271K50
	C5854		CKSRYB473K25
	C5703		CKSRYB561K50
	C5893		CKSRYF104Z25
	C5413, C5414		CQMA222J50

RESISTORS

	R5202		RS1/10S220J
	R5723		RS1/10S222J
	Other Resistors		RS1/16S□□□J

Mark	No.	Description	Part No.

OTHERS

	5802	CABLE HOLDER(7P)	51063-0705
	CN5801	FFC CONNECTOR 9P	52045-0945
	CN5701	13P CONNECTOR	52045-1345
	CN5702	13P SOCKET	AKP7070
	CN5401	19P SOCKET	AKP7073
	CN5201	B TO B PLUG 16P	AKP7166
	5801	SCREW PLATE	VNE1948
	X5701	CRYSTAL RESONATOR (4.332MHz)	ASS7004

H KEYL ASSY

SEMICONDUCTORS

	Q5612		HN1A01FU
	D5601		E1L55-3B0A
	D5611		VRPG5615S

SWITCHES AND RELAYS

	S5911		ASG7013

CAPACITORS

	C5601		CKSRYB473K25

RESISTORS

	All Resistors		RS1/16S□□□J

OTHERS

	CN5622	FFC CONNECTOR 9P	52045-0945

I KEYR ASSY

SEMICONDUCTORS

	D5602		E1L55-3B0A

SWITCHES AND RELAYS

	S5921		ASG7013

CAPACITORS

	C5602		CKSRYB473K25

RESISTORS

	All Resistors		RS1/16S□□□J

OTHERS

	5621	CABLE HOLDER(7P)	51063-0705
	J 5621	JUMPER WIRE	D15A07-100-2651

J FM/AM TUNER MODULE (AXQ7229)

SEMICONDUCTORS

	IC201		BA1451F
	IC202		LC72131MD-TFB
	Q201, Q204, Q205, Q601		2SC2412K
	Q202		DTA124ES
	Q203		DTC124EK
	D201		1SS133
	D202		MTZJ5.1C
	D101		UDZS6.8B

Mark	No.	Description	Part No.

COILS AND FILTERS

	L201	FM DETECTOR COIL	ATE7003
	F202	FM CERAMIC FILTER	ATF-107
	F201	FM CERAMIC FILTER	ATF-119
	F203	AM CERAMIC FILTER	ATF1155
	F601	ANTIBIRDY FILTER	ATF7025
	L601		LCTA270J2520

CAPACITORS

	C605		CCSQCH680J50
	C212, C213, C226, C233–C235		CCSRCH101J50
	C240, C614		CCSRCH101J50
	C206		CCSRCH120J50
	C231, C232		CCSRCH150J50
	C223		CEAT100M50
	C229		CEAT101M10
	C224		CEAT1R0M50
	C227		CEAT220M25
	C241		CEAT2R2M50
	C243		CEAT330M16
	C228		CEAT3R3M50
	C237		CEAT470M10
	C211		CEJA1R0M50
	C210		CEJA470M16
	C103, C104, C204, C238		CKSRYB102K50
	C102, C208, C216, C217, C220		CKSRYB103K50
	C239, C242, C604, C615		CKSRYB103K50
	C225		CKSRYB153K50
	C607, C608		CKSRYB182K50
	C201, C205, C214, C230, C236		CKSRYB223K50
	C244		CKSRYB223K50
	C221		CKSRYB224K10
	C603		CKSRYB392K50
	C215		CKSRYB471K50
	C202, C222		CKSRYB473K16
	C606		CKSRYB561K50

RESISTORS

	R211		RD1/4PU221J
	R221		RD1/4PU222J
	R233		RD1/4PU391J
	R103, R104		RS1/10S221J
	Other Resistors		RS1/16S□□□J

OTHERS

	CN201	13P CONNECTOR	52044-1345
	BN201	2P TERMINAL WITH PAL	AKA7002
		SHIELD CASE T	ANK7072
		SHIELD CASE B	ANK7073
	X201	CRYSTAL RESONATOR (7.2MHz)	ASS1093
		FM FRONTEND	AXF7004
		AM RF TUNING BLOCK	AXX7072

J FM/AM TUNER MODULE (AXQ7228)

SEMICONDUCTORS

	IC201		BA1451F
	IC202		LC72131MD-TFB
	Q201, Q204, Q205		2SC2412K
	Q202		DTA124ES
	Q203		DTC124EK

Mark	No.	Description	Part No.
	D201		1SS133
	D202		MTZJ5.1C

COILS AND FILTERS

	L201	FM DETECTOR COIL	ATE7003
	F202	FM CERAMIC FILTER	ATF-107
	F201	FM CERAMIC FILTER	ATF-119
	F203	AM CERAMIC FILTER	ATF1155

CAPACITORS

	C206		CCSRCH100D50
	C212, C213, C226, C233–C235		CCSRCH101J50
	C240		CCSRCH101J50
	C231, C232		CCSRCH150J50
	C223		CEAT100M50
	C229		CEAT101M10
	C224		CEAT1R0M50
	C227		CEAT220M25
	C241		CEAT2R2M50
	C243		CEAT330M16
	C228		CEAT3R3M50
	C237		CEAT470M10
	C211		CEJA1R0M50
	C210		CEJA470M16
	C204, C238, C602		CKSRYB102K50
	C101, C102, C208, C220, C239		CKSRYB103K50
	C242, C601		CKSRYB103K50
	C216, C217		CKSRYB123K50
	C225		CKSRYB153K50
	C201, C205, C209, C214, C230		CKSRYB223K50
	C236, C603		CKSRYB223K50
	C221		CKSRYB224K10
	C202, C222		CKSRYB473K16
	C215		CKSRYB681K50

RESISTORS

	R211		RD1/4PU221J
	R221		RD1/4PU222J
	R233		RD1/4PU391J
	R243		RS1/10S0R0J
	R103		RS1/10S331J
	R104		RS1/10S391J
	Other Resistors		RS1/16S☐☐☐J

OTHERS

	CN201	13P CONNECTOR	52044-1345
	BN201	TERMINAL 4-P	AKA7003
		SHIELD CASE T	ANK7072
		SHIELD CASE B	ANK7073
	X201	CRYSTAL RESONATOR (7.2MHz)	ASS1093
		FM FRONT END	AXF7003
		AM RF TUNING BLOCK	AXX7071

K MOTHER ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠	IC8003	PROTECTOR (750mA)	AEK7062
⚠	IC8002	PROTECTOR (1A)	AEK7064
⚠	IC8001	PROTECTOR (1.5A)	AEK7065
	IC5301		BU4052BCF
	IC8801		MM1540BF
⚠	IC8011		NJM7812FA
⚠	IC8802		NJM78L08A
	IC5501		PDC080A
⚠	IC8031		PQ20RV1E
	Q8011, Q8031		2SB1237X
⚠	Q8021, Q8041		2SB1375
	Q8022, Q8042		2SC2412K
	Q5301, Q5561, Q5572, Q5573		2SC4081
	Q8051		2SD2114K
	Q5503, Q5504		DTC124EUA
	Q5571		DTC143EUA
	Q8801		RN1903
	Q8802		RN2903
	Q5501, Q5502		UN5212
	D5571, D8032		1SR154-400
	D5573, D8011, D8031, D8801–D8803		1SS355
	D8002		UDZ2.0B
	D5302		UDZ4.7B
	D5502–D5506, D8061–D8066		UDZS8.2B

COILS AND FILTERS

	L5571		LFEA220J
	L8831, L8841	CHIP BEADS	VTL1087

CAPACITORS

	C5575		BCH1072
	C5351–C5358, C5502, C5506, C5507		CCSRCH101J50
	C5510, C5511, C5513–C5517		CCSRCH101J50
	C5523–C5525, C5577, C8063–C8065		CCSRCH101J50
	C5520		CCSRCH221J50
	C8822, C8832, C8842		CCSRCH331J50
	C5576, C8012, C8032, C8043		CEAT100M50
	C5303, C5304, C5572, C8023, C8033		CEAT101M10
	C8042		CEAT101M10
	C8803		CEAT101M16
	C5578, C8812, C8813		CEAT1R0M50
	C8051		CEAT220M50
	C8013, C8022, C8805		CEAT470M16
	C8821, C8831		CEAT471M6R3
	C5508, C5521, C5522, C8823		CKSRYB102K50
	C5301, C5302, C5305, C5503–C5505		CKSRYB103K50
	C5518, C5571, C5573, C8808		CKSRYB103K50
	C8804, C8806, C8811, C8814, C8815		CKSRYB104K25
	C8841		CKSRYB104K25
	C5509, C5512, C5574, C8011, C8021		CKSRYB473K25
	C8031, C8041		CKSRYB473K25
	C5359		CKSRYF104Z50

RESISTORS

	R5507, R5534		RAB4C103J
	R5532		RAB4C104J
	R5501, R5503, R5505, R5510, R5520		RAB4C221J
	R5524, R5528–R5531, R5533, R5543		RAB4C221J
	R5545, R5546, R5548		RAB4C221J
	R5535		RAB4C473J
	R8032		RS1/16S1501F
	R8031		RS1/16S4700F
	Other Resistors		RS1/16S☐☐☐J

OTHERS

Mark	No.	Description	Part No.
	5504	19P SOCKET	AKP7001
	CN8802	4P MINI DIN SOCKET	AKP7008
	CN5503	13P PLUG	AKP7059
	CN5502, CN5505	19P PLUG	AKP7062
	CN5506	21P PLUG	AKP7063
	CN8001	20P SOCKET	AKP7129
	5501	BUZZER	APV7002
	JA5501	STEREO MINI JACK	DKN1124
	CN5507	31P FFC CONNECTOR	HLEM31S-1
	JA8801	1P PIN JACK	VKB1063
	KN8001	EARTH METAL FITTING	VNF1084
	X5501	CERAMIC RESONATOR (10MHz)	ASS7034

L DSP ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC8301		AK4527BVQ
	IC8252		BA4558F-HT
	IC8251		BU4052BCF
	IC8751		K6E0808C1E-JC15
	IC8101		LC89056W-E
	IC8651		TC74HCU04AF
	IC8701		YSS912C
	Q8251–Q8253		2SC4081
	Q8254		DTA124EUA
	Q8651		DTA143EUA
	Q8101		RN1903
	Q8102, Q8351		RN2903
	Q8353		UN5212
	D8353		DAN202K
	D8351, D8352		DAP202K
	D8252		UDZ4.7B

COILS AND FILTERS

Mark	No.	Description	Part No.
	F8101, F8102, F8152–F8154, F8156		DTF1064
	F8701, F8702, F8751	CHIP BEAD	DTF1064
	F8301, F8302	CHIP BEAD	DTF1067
	F8611, F8651, F8652	CHIP SOLID INDUCTOR	VTF1096
	L8128	CHIP BEADS	VTL1086

CAPACITORS

Mark	No.	Description	Part No.
	C8607, C8654, C8757		CCSRCH100D50
	C8126, C8705, C8708, C8715, C8718		CCSRCH101J50
	C8724, C8727, C8733, C8734, C8756		CCSRCH101J50
	C8121, C8122, C8713, C8714		CCSRCH200J50
	C8153, C8721, C8736, C8737		CCSRCH471J50
	C8251, C8252, C8255, C8256		CEAT100M50
	C8102, C8259, C8260, C8302		CEAT101M10
	C8309, C8310, C8316, C8319, C8652		CEAT101M10
	C8704, C8753		CEAT101M10
	C8307, C8308, C8702		CEAT220M50
	C8751		CEAT221M6R3
	C8612, C8656		CEAT470M16
	C8116		CEJQ470M6R3
	C8326, C8601, C8735, C8794		CKSRYB102K50
	C8114, C8115, C8151, C8152, C8192		CKSRYB103K50
	C8257, C8258, C8261, C8305, C8792		CKSRYB103K50
	C8112, C8113, C8191, C8791		CKSRYB104K25
	C8313, C8314		CKSRYB222K50
	C8101, C8103, C8104, C8110, C8117		CKSRYB473K25
	C8119, C8123, C8301, C8304		CKSRYB473K25
	C8311, C8312, C8315, C8318, C8320		CKSRYB473K25
	C8613, C8614, C8651, C8653, C8655		CKSRYB473K25
	C8657, C8701, C8703, C8707, C8710		CKSRYB473K25
	C8712, C8717, C8720, C8723, C8726		CKSRYB473K25
	C8729, C8731, C8732, C8752, C8754		CKSRYB473K25
	C8602		CKSRYF104Z25

RESISTORS

Mark	No.	Description	Part No.
	R8101, R8105, R8125, R8311, R8314		RAB4C101J
	R8703–R8705, R8709–R8711, R8713		RAB4C101J
	Other Resistors		RS1/16S□□□J

OTHERS

Mark	No.	Description	Part No.
	CN8201	11P PLUG	AKP7058
	CN8301	17P PLUG	AKP7061
	JA8611	OPT. LINK IN 8MB/S	GP1FA501RZ
	CN8101	31P FFC CONNECTOR	HLEM31S-1
	JA8651	OPT. LINK OUT 8MB/S	JFJ1001
	JA8601	1P PIN JACK	VKB1077
	8191	SCREW PLATE	VNE1948
	KN8791, KN8792	EARTH METAL FITTING	VNF1084
	X8101, X8701	(12.288MHz) CRYSTAL RESONATOR	VSS1140

M JACK ASSY

COILS AND FILTERS

Mark	No.	Description	Part No.
	L8201–L8203, L8211–L8213		VTL1112
	L8221–L8223	CHIP BEADS	VTL1112

CAPACITORS

Mark	No.	Description	Part No.
	C8201–C8204, C8211–C8214		CCSRCH101J50
	C8221–C8224		CCSRCH101J50
	C8205, C8215, C8225		CKSRYB103K50

RESISTORS

Mark	No.	Description	Part No.
	All Resistors		RS1/16S□□□J

OTHERS

Mark	No.	Description	Part No.
	8201	PIN JACK(6P)	AKB7012
	CN8404	11P SOCKET	AKP7069
	CN8402, CN8403	17P SOCKET	AKP7072

N BALANCE ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC8401, IC8421, IC8431, IC8441		BA4558F-HT
	IC8461, IC8471, IC8481, IC8501		BA4558F-HT
	IC8511		BA4558F-HT
	Q8401, Q8402, Q8441, Q8442		2SD2114K
	Q8481, Q8482		2SD2114K
	Q8551		DTA124EUA

CAPACITORS

Mark	No.	Description	Part No.
	C8409, C8410		CCSRCH680J50
	C8449, C8450, C8489		CCSRCH820J50
	C8401, C8402, C8411, C8412		CEAT100M50
	C8415, C8416, C8441, C8442		CEAT100M50
	C8451, C8452, C8455, C8456		CEAT100M50
	C8481, C8482, C8491, C8492		CEAT100M50
	C8495, C8496		CEAT100M50
	C8552, C8555		CEAT101M16
	C8413, C8414, C8423–C8426		CKSRYB103K50
	C8433–C8436, C8453, C8454		CKSRYB103K50
	C8463–C8466, C8473–C8476		CKSRYB103K50
	C8493, C8494, C8503–C8506		CKSRYB103K50
	C8513–C8516, C8556, C8558, C8559		CKSRYB103K50
	C8405, C8406, C8445, C8446, C8485		CKSRYB122K50
	C8490		CKSRYB122K50
	C8403, C8404, C8443, C8444, C8483		CKSRYB152K50
	C8486		CKSRYB224K10
	C8553, C8554		CKSRYB473K25

RESISTORS

Mark	No.	Description	Part No.
	R8421, R8422, R8431, R8432		RS1/16S1002F
	R8461, R8462, R8471, R8472		RS1/16S1002F
	R8501, R8502, R8511, R8512		RS1/16S1002F
	Other Resistors		RS1/16S□□□J

OTHERS

Mark	No.	Description	Part No.
	CN8401	17P PLUG	AKP7061
	CN8551	12P CONNECTOR	AKP7131
	8401	PCB BINDER	VEF1040

O CNB ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	D5656		1SS355
	D5655		UDZ2.0B
	D5651–D5654		UDZS8.2B

RESISTORS

Mark	No.	Description	Part No.
	All Resistors		RS1/16S□□□J

OTHERS

Mark	No.	Description	Part No.
	CN5652	11P PLUG	AKP7058
	CN5651	10P CONNECTOR	AKP7134

P FLDP ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC5661		MSM9202-01
	Q5681		UN5212
	D5681		1SS355
	D5661		UDZS8.2B

COILS AND FILTERS

Mark	No.	Description	Part No.
	L5663		LAU100J
	L5662		LAU220J

CAPACITORS

Mark	No.	Description	Part No.
	C5674		CCSRCH470J50
	C5681		CEJQ100M16
	C5661, C5664		CEJQ101M10
	C5669		CEJQ330M35
	C5953		CEJQ470M16
	C5671–C5673		CKSRYB102K50
	C5679, C5682		CKSRYB103K50
	C5662, C5663, C5665, C5666, C5668		CKSRYF473Z50
	C5670, C5675, C5952		CKSRYF473Z50

RESISTORS

Mark	No.	Description	Part No.
	All Resistors		RS1/16S□□□J

OTHERS

Mark	No.	Description	Part No.
	V5661	FL TUBE	AAV7082
	CN5661	11P SOCKET	AKP7069
	5951	REMOTE RECEIVER UNIT	GP1UM27XK

6. ADJUSTMENT

- **Please connect it to the POWERED SUBWOOFER S-DV88SW or S-DV77SW and DISPLAY UNIT AXX7107, for adjustment and operation inspection.**

6.1 ADJUSTMENT ITEMS AND LOCATION

■ Adjustment Items

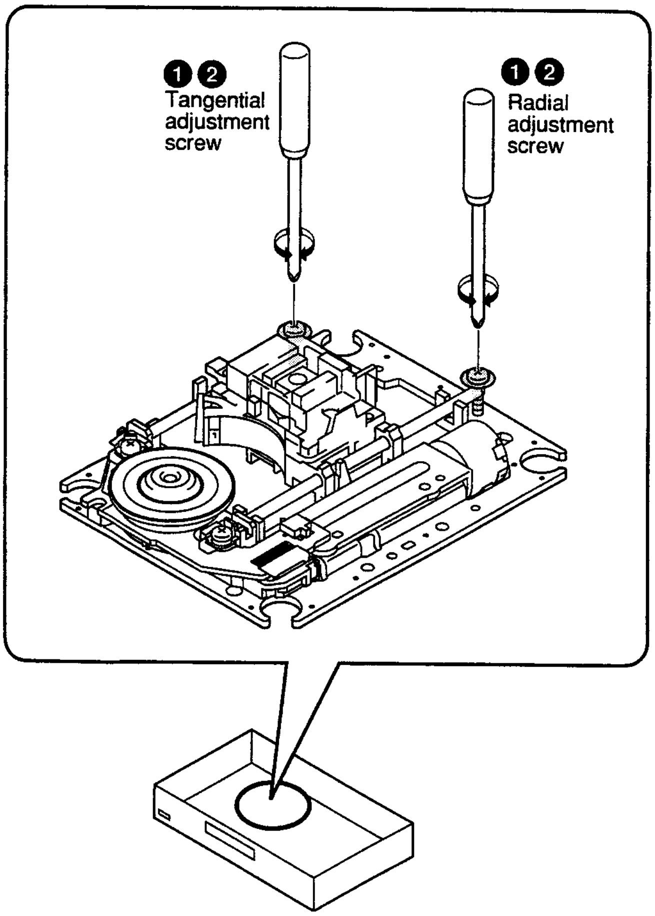
[Mechanism Part]

❶ Tangential and Radial Height Coarse Adjustment
❷ DVD Jitter Adjustment
❸ Initialize the Focus Sweep Setting

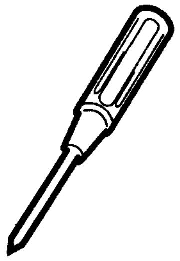
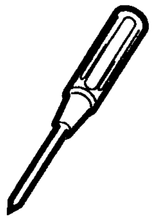
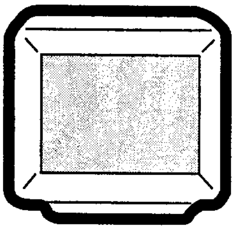
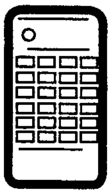
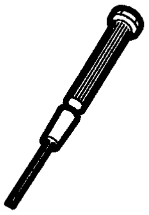
[Electrical Part]
Electrical adjustments are not required.

■ Adjustment Points (Mechanism Part)

Cautions: After adjustment, adjustment screw locks with the Screw tight.



6.2 JIGS AND MEASURING INSTRUMENTS

 ⊕ Screwdriver (large)	 ⊕ Screwdriver (medium)
 TV monitor	 Test mode remote control unit (GGF1067)
 ⊕ Precise screwdriver	 DVD test disc (GGV1025)
Screw tight (GYL1001)	

6.3 NECESSARY ADJUSTMENT POINTS

■ Exchange Parts of Mechanism Assy

When		Adjustment Points	
Exchange the Pickup	➡	**Mechanical point**	❶, ❷, ❸ * After adjustment, screw locks with the Screw tight.
		Electric point	————
Exchange the Traverse Mechanism	➡	**Mechanical point**	❸
		Electric point	————
Exchange the Spindle Motor	➡	**Mechanical point**	❷, ❸ * After adjustment, screw locks with the Screw tight.
		Electric point	————

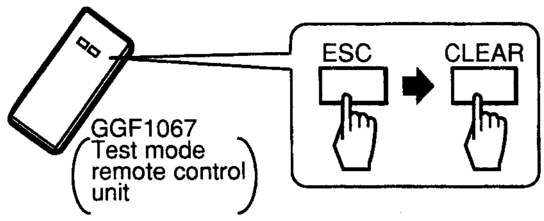
■ Exchange PCB Assy

When		Adjustment Points	
Exchange PC Board LOAB, DVDM ASSY	➡	**Mechanical point**	————
		Electric point	————

*

Purpose: To set the sweep which was correct with the individual Traverse mechanism.

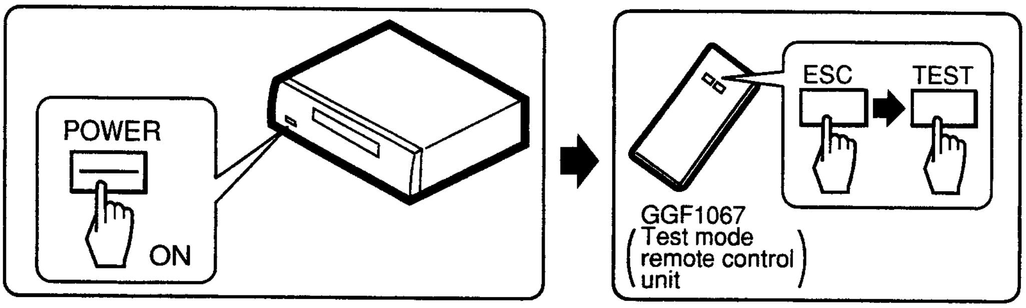
Be sure to perform the following step finally when replaced Pickup, Traverse Mechanism and Spindle Motor.



(It is necessary when performed adjustment procedure ❷.)

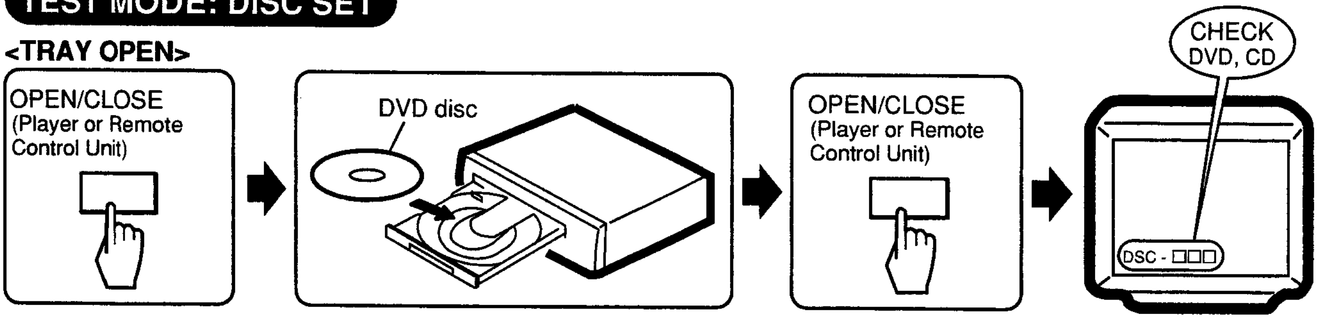
6.4 TEST MODE

TEST MODE: ON


POWER
ON
ESC
TEST
GGF1067
(Test mode remote control unit)

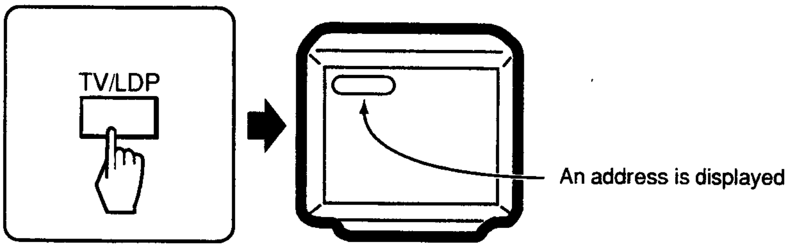
TEST MODE: DISC SET

<TRAY OPEN>


OPEN/CLOSE
(Player or Remote Control Unit)
DVD disc
OPEN/CLOSE
(Player or Remote Control Unit)
CHECK
DVD, CD
DSC - □□□

TEST MODE: PLAY

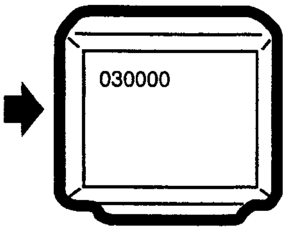
<PLAY>


TV/LDP
An address is displayed

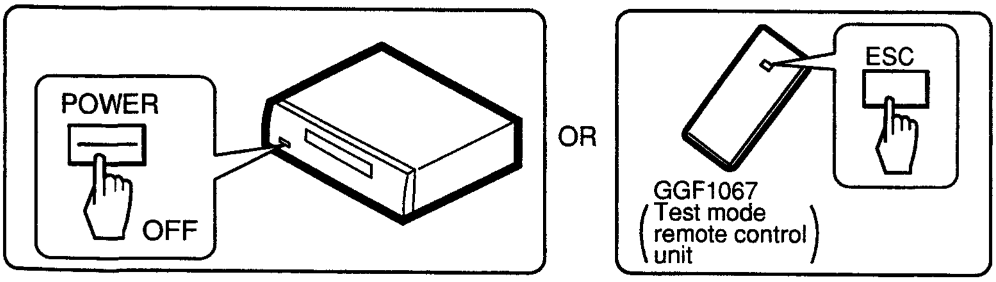
< When playback with the target address of disc (DVD)>

For example, when playback with # 30000

During PLAY +10 ➡ 3 ➡ 0 ➡ 0 ➡ 0 ➡ 0 ➡ CHP/TIM Press keys in order



TEST MODE: OFF

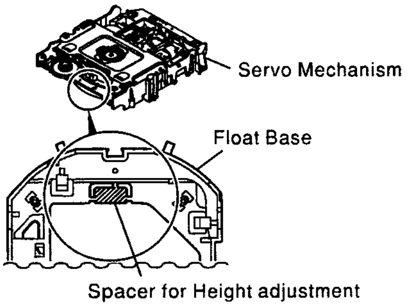

POWER
OFF
OR
ESC
GGF1067
(Test mode remote control unit)

6.5 MECHANISM ADJUSTMENT

❶ Tangential and Radial Height Coarse Adjustment

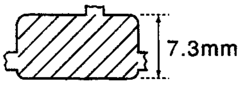
START

- Remove the servo mechanism.
- Remove a Spacer for height adjustment attached to the back side (shaded area) of the Servo Mechanism (Float Base) with nippers.

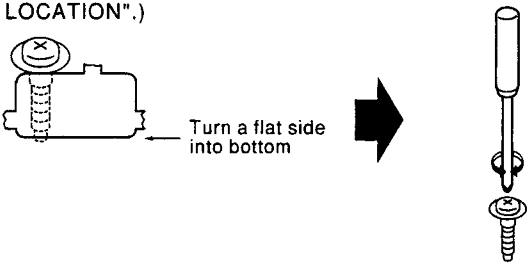

Servo Mechanism
Float Base
Spacer for Height adjustment

Note:
Turn the Short switch to Short side when removing the Pickup Flexible Cable. (Refer to "7.1.6 DISASSEMBLY".)

Cautions:
Because there is not a Spacer for height adjustment in adjustment after the second time, will keep it at need.
(This parts is Traverse mechanism exclusive use of a model for 2001 years)



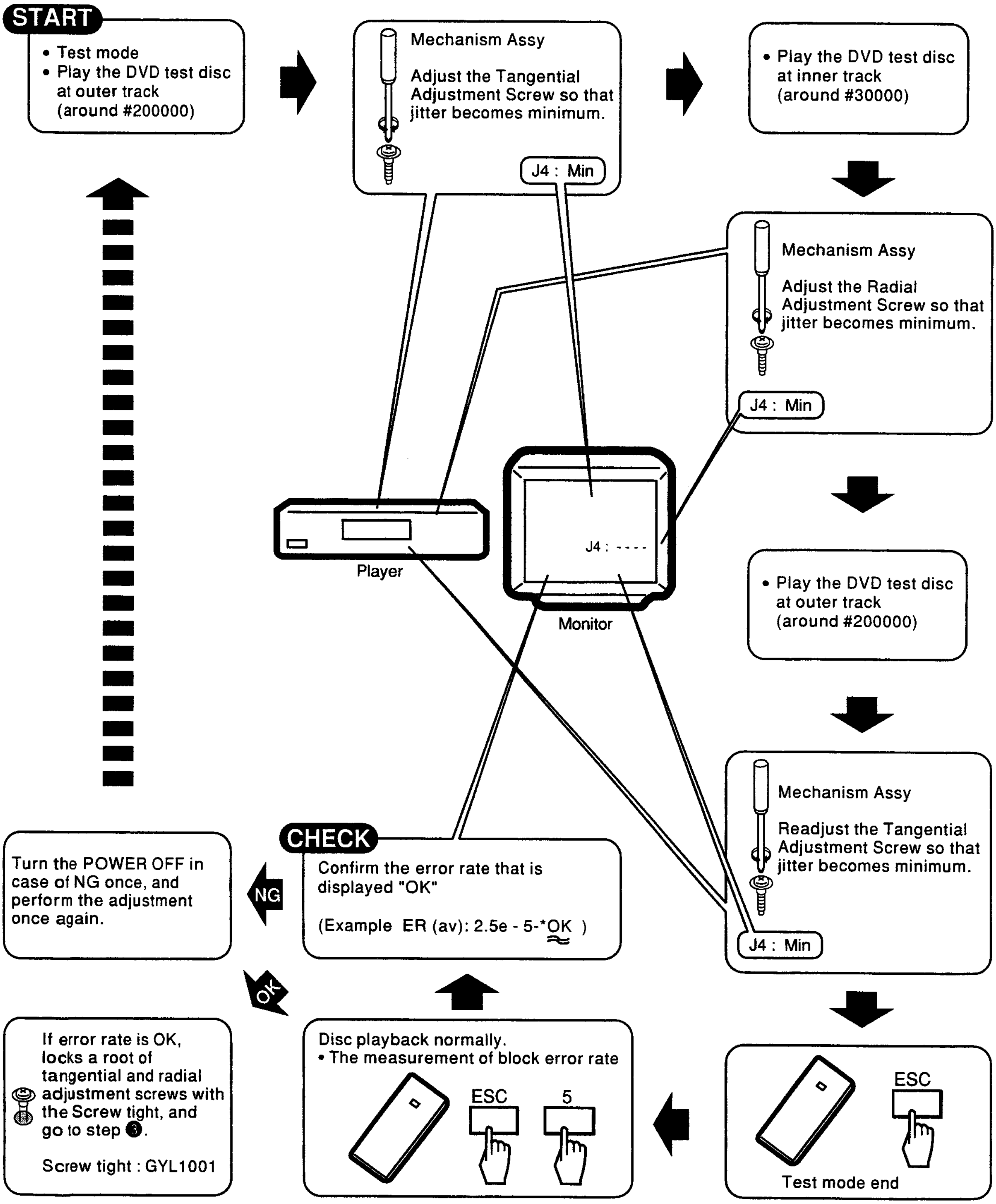
Put a spacer between a Tangential (or Radial) adjustment screw and Mechanism Base and turn each screw to adjust the height. (Refer to "6.1 ADJUSTMENT ITEMS AND LOCATION".)


Turn a flat side into bottom

❷ DVD Jitter Adjustment

- Playback method of inner and outer address for the purpose is refererd to "6.3 TEST MODE".
- Jitter indication of the monitor is refererd to "7.1.3 TEST MODE SCREEN DISPLAY".

Use disc: GGV1025



START

- Test mode
- Play the DVD test disc at outer track (around #200000)

Mechanism Assy

Adjust the Tangential Adjustment Screw so that jitter becomes minimum.

- Play the DVD test disc at inner track (around #30000)

Mechanism Assy

Adjust the Radial Adjustment Screw so that jitter becomes minimum.

- Play the DVD test disc at outer track (around #200000)

Mechanism Assy

Readjust the Tangential Adjustment Screw so that jitter becomes minimum.

Test mode end

Disc playback normally.
- The measurement of block error rate

CHECK

Confirm the error rate that is displayed "OK"

(Example ER (av): 2.5e - 5-*OK)

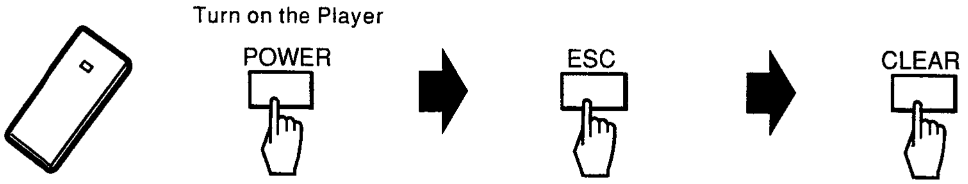
Turn the POWER OFF in case of NG once, and perform the adjustment once again.

If error rate is OK, locks a root of tangential and radial adjustment screws with the Screw tight, and go to step ❸.

Screw tight : GYL1001

③ Initialize the Focus Sweep Setting

Purpose: To set the sweep which was correct with the individual Traverse mechanism.


Turn on the Player
POWER
ESC
CLEAR

Note: Be sure to perform this step when replaced the Pickup or Traverse mechanism.

6.6 TUNER SECTION

■ AM Tuner Section

- There is no adjustment in the AM tuner.

■ FM Tuner Section

- Set the mode selector to FM BAND.
- Connect the wiring as shown in Fig. 1.

Step No.	Adjustment Title	ANT. Input level and signal condition			Adjustment	
		Frequency (MHz)	Modulation	Input Level (dBµV)	Adjust point	Contents
1	T-METER Adjustment	98	OFF	80	L201	Adjust L201 so that the DC voltage between Pin 21 and Pin 23 of IC201 (Test point Vtm) gets within 0 ± 50mV.

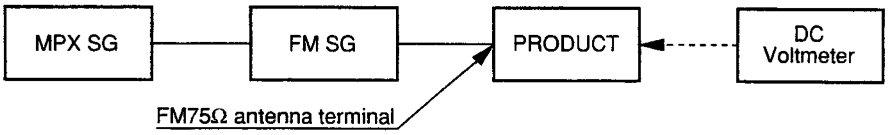

MPX SG
FM SG
PRODUCT
DC Voltmeter
FM75Ω antenna terminal

Fig.1 Adjustment Wiring Diagram

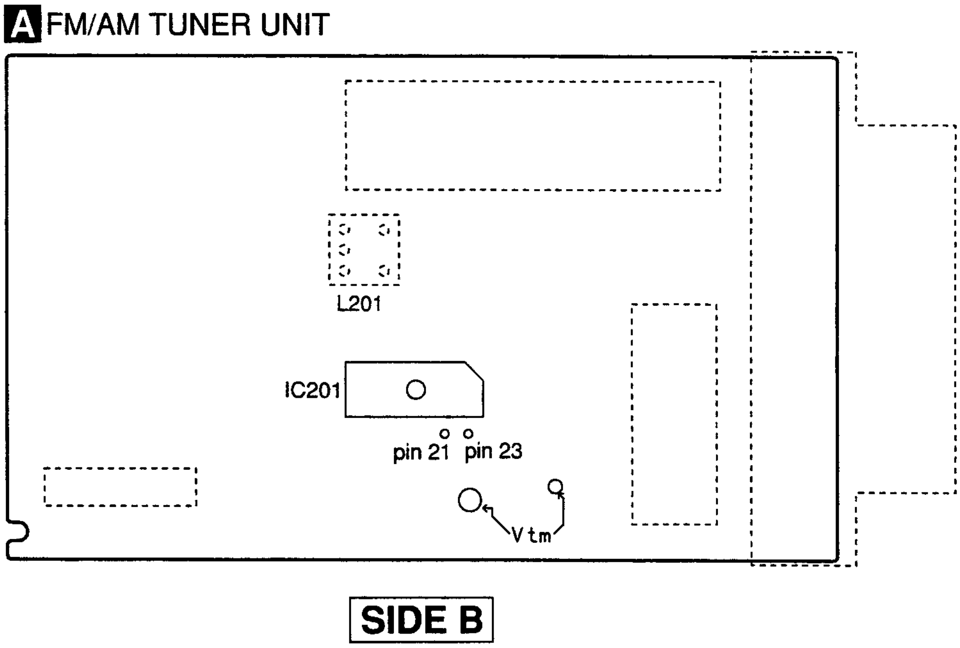

A FM/AM TUNER UNIT
L201
IC201
pin 21
pin 23
Vtm
SIDE B

Fig.2 Adjustment Point

7. GENERAL INFORMATION

7.1 DIAGNOSIS

7.1.1 SELF-DIAGNOSTIC FUNCTION OF PICKUP DEFECTIVE

This unit can confirm the laser diode current value (DVD: 650nm, CD: 780nm) of pickup on the Test Mode screen.
(Press the ESC → TEST keys in order on the test mode remote control unit (GGF1067) to enter the test mode.)

It's effective in case of the following condition.

Symptom

- Indicates "No Disc" in FL display.
- Player does not playback, etc..

Procedure of Self-Diagnosis

① Enter the Test mode.

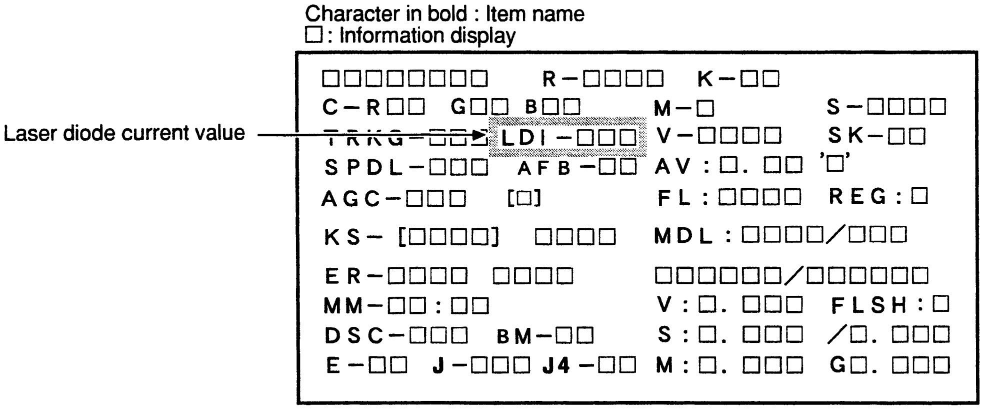
② When diagnosing the 650nm laser diode:
Press the TEST → 1 keys in order, and turn on the laser diode (It light-up for nine seconds.).
When diagnosing the 780nm laser diode:
Press the TEST → 4 keys in order, and turn on the laser diode (It light-up for nine seconds.).

When let it turn on once again after performed ② once,
After pressed REP.B key once
650nm: Press the TEST → 1 keys in order
780nm: Press the TEST → 4 keys in order

③ Confirm the indicated value of the laser diode current (LDI). (Refer to following figure.)

④ **When indicated value is more than 100, pickup is defective. → Replacement is necessary**
Replace the Traverse Mechanism Assy or Pickup.

Note : When a DVD disc or a CD disc is played in the test mode, this function is effective.



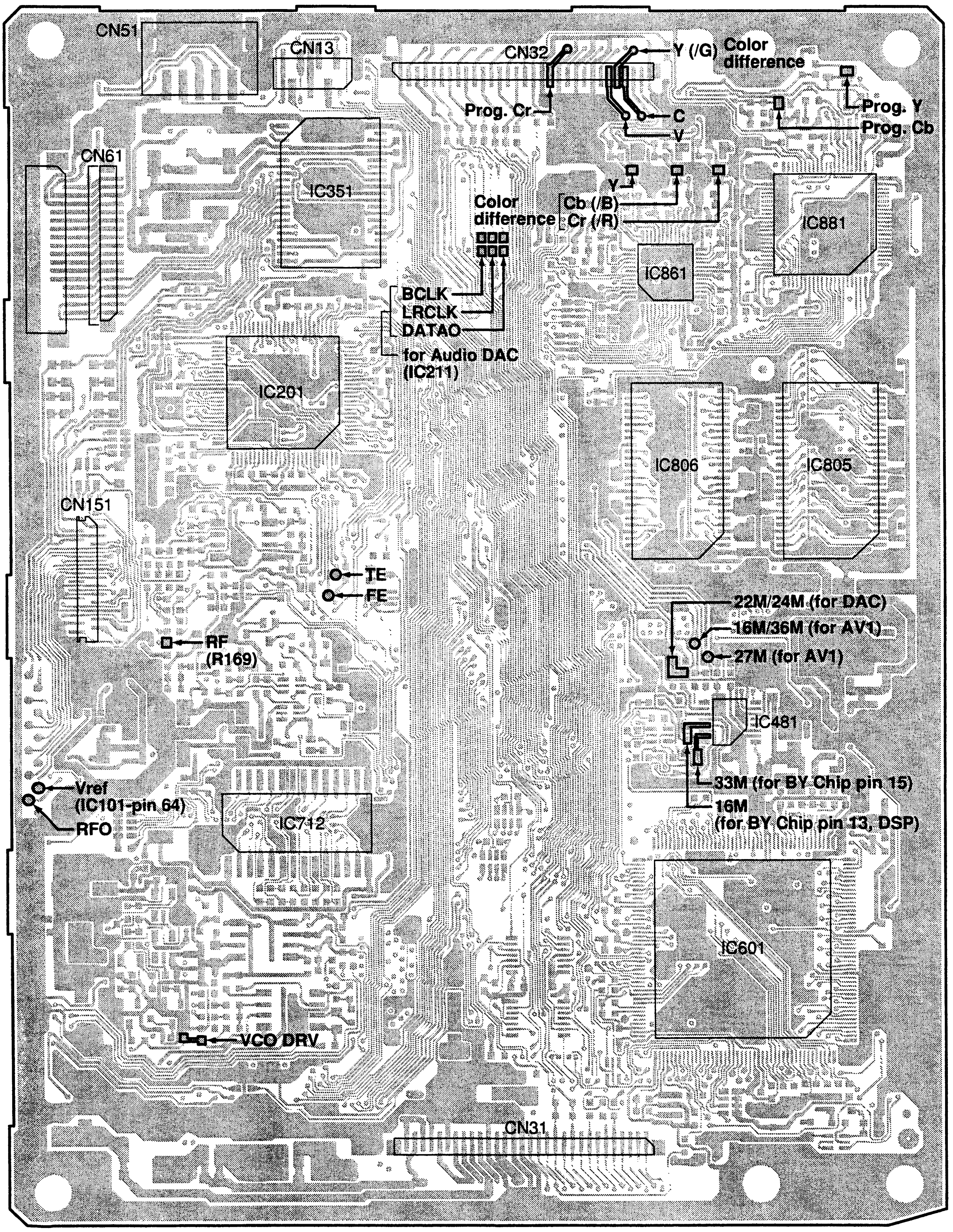
```
□□□□□□□□□     R−□□□□   K−□□
C−R□□  G□□  B□□       M−□           S−□□□□
TRKG−□□□   LDI −□□□   V−□□□□        SK−□□
SPDL−□□□   AFB −□□    AV : □. □□ '□'
AGC−□□□    [□]        FL : □□□□    REG : □
KS− [□□□□]  □□□□      MDL : □□□□/□□□
ER−□□□□  □□□□         □□□□□□/□□□□□□
MM−□□ : □□            V : □. □□□   FLSH : □
DSC−□□□  BM−□□        S : □. □□□   /□. □□□
E−□□  J−□□□  J4−□□    M : □. □□□   G□. □□□
```

Test Mode Screen Display

7.1.2 TEST POINTS LOCATION

This model has not test terminal.
Please use following points on the DVDM Assy when checking RF, FE and TE, etc..

DVDM ASSY


CN51
CN13
CN32
Y (/G) Color difference
Prog. Cr
C
V
Prog. Y
Prog. Cb
CN61
IC351
Y
Color difference
Cb (/B)
Cr (/R)
IC881
IC861
BCLK
LRCLK
DATAO
for Audio DAC (IC211)
IC201
IC806
IC805
CN151
TE
FE
22M/24M (for DAC)
16M/36M (for AV1)
27M (for AV1)
RF (R169)
IC481
Vref (IC101-pin 64)
RFO
IC712
33M (for BY Chip pin 15)
16M (for BY Chip pin 13, DSP)
IC601
VCO DRV
CN31

SIDE A

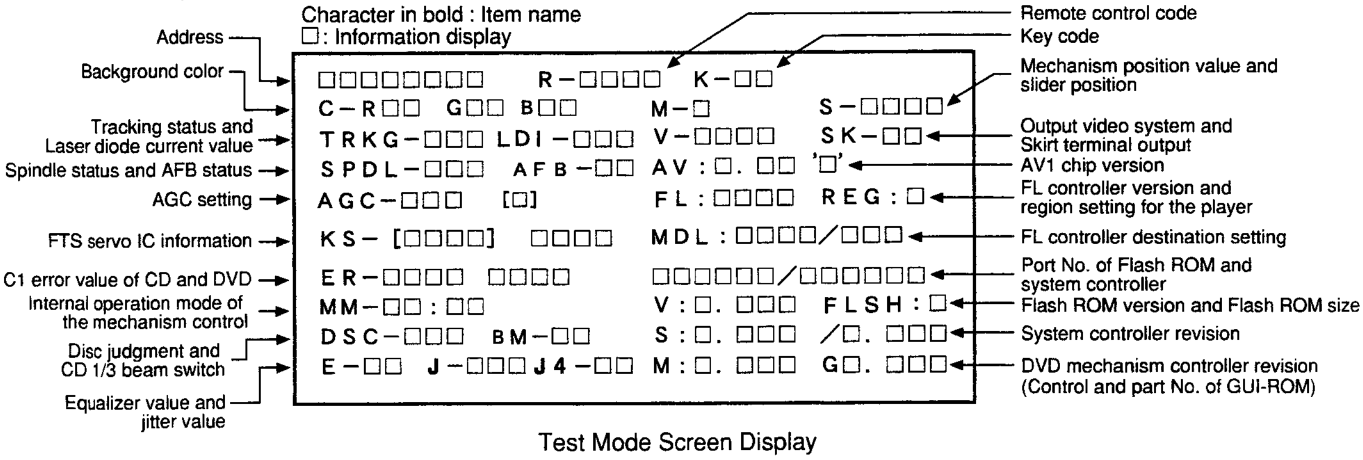
7.1.3 TEST MODE SCREEN DISPLAY

■ TEST MODE SCREEN DISPLAY

When the test mode is entered, press the [ESC] button and the [TEST] button in order of the test mode remote control unit (GGF1067).

Consecutive double-OSD display is supported during test mode. The screen is composed 10 lines with a maximum of 32 characters per line. It can't be used with the debugging display mode together.

• Screen Composition


Character in bold : Item name
□ : Information display
Address
Background color
Tracking status and Laser diode current value
Spindle status and AFB status
AGC setting
FTS servo IC information
C1 error value of CD and DVD
Internal operation mode of the mechanism control
Disc judgment and CD 1/3 beam switch
Equalizer value and jitter value
□□□□□□□□□ R−□□□□ K−□□
C−R□□ G□□ B□□ M−□ S−□□□□
TRKG−□□□ LDI −□□□ V−□□□□ SK−□□
SPDL−□□□ AFB −□□ AV : □. □□ '□'
AGC−□□□ [□] FL : □□□□ REG : □
KS− [□□□□] □□□□ MDL : □□□□/□□□
ER−□□□□ □□□□ □□□□□□/□□□□□□
MM−□□ : □□ V : □. □□□ FLSH : □
DSC−□□□ BM−□□ S : □. □□□ /□. □□□
E−□□ J−□□□ J4−□□ M : □. □□□ G□. □□□
Remote control code
Key code
Mechanism position value and slider position
Output video system and Skirt terminal output
AV1 chip version
FL controller version and region setting for the player
FL controller destination setting
Port No. of Flash ROM and system controller
Flash ROM version and Flash ROM size
System controller revision
DVD mechanism controller revision (Control and part No. of GUI-ROM)

Test Mode Screen Display
(First Screen Display)

Caution :
The first screen and second screen switch by pressing [DISPLAY] key of the remote control unit.
It is only a version display part on the lower right of the screen those contents of display change.
ATB : ON/OFF information display and AGC manual setting display deleted with the second generation.
The displays of Tilt error value, Tilt servo status and pickup DVD/CLD display deleted with the third generation becomes LD part is deleted.

• Description of Each Item on the Display

(1) Address indication

The address being traced is displayed in number.
DVD : ID indication (hexadecimal number, 8 digits) [* * * * * * * *]
CD : A-TIME (min. sec.) [0 0 0 0 * * * *]
(Note : For DVDs, decimal-number indication is possible.)

(2) Code indication of the remote control unit [R – * * * *]

The code for the key pressed on the remote control unit, which is received by the FL controller, is displayed while the key is pressed. In the case of the double code, the second code will be displayed.

(3) Key code indication for the main unit [K – * *]

The code for the key pressed on the main unit, which is received by the system controller, is displayed while the key is pressed.

(4) Background color indication [C – R* * G* * B* *]

(5) ① Tracking status [TRKG – *]**

Tracking on [ON]
Tracking off [OFF]

② Laser diode current value [LDI – *]**

(6) ① Spindle status [SPDL – * * *]

Spindle accelerator and brake, free-runnimg	[A/B]
FG servo	[FG]
Rough, velocity phase servo	[SRV]
Offset addition, rough, velocity phase servo	[O_S]

② AFB status [AFB – * *]

ON	[ON]
OFF	[OFF]

(7) Mechanism position value [M – *]

Position code	[1] to [3]

(8) Slider position [S – * * * *]

CD TOC area	[IN]
CD active area	[CD]

(9) AGC setting [AGC – * *]

AGC on	[AGC-ON]
AGC off	[AGC-OFF]

(10) Output video system [V – * * * *]

NTSC system	[NTSC]
PAL system	[PAL]
Auto-setting	[AUTO]

Skirt terminal output [SK – * *]

VIDEO	[00]
S-VIDEO	[01]
RGB	[02]

Note : Display only the model which can do the output setting of skirt terminal.

(11) FTS servo IC information

DSP coefficient indication [KS – [* * * *] * * * *]

Displays the address (four digits) of the specified coefficient and the setting value (four digits) with [TEST] and [9] keys.

(12) Error rate indication

① C1 error value of CD	[ER – C1 * * * *]
② C1 error value of DVD	[ER – * * * * * * * *]

(13) Internal operation mode of mechanism controller [MM – * * : * *]

Internal mechanism mode (2 digits) and internal mechanism step (2 digits) of the mechanism controller

(14) ① Disk sensing [DSC – * * *]

The type of discs loaded is displayed.
[DVD], [CD], [VCD], [ ]

② CD 1/3 beam switch [BM – * *]

(15) ① Equalizer value [E – * *]

② Jitter value [J – * *]

Make the jitter four times, and renew it in every 0.5 second. [J4 – * *]

CD is effective only in the jitter value.

(16) Version of the AV-1 chip [AV : * . * *' *']

(17) ① Version of the FL controller [FL : * * * *]

② Region setting of the player [REG : *]

Setting value [1] to [6]

(18) Destination setting of the FL controller [MDL : * * * * / * * *]

Four charactors in the front represent the type of model : three charactors in the back represent the destination code.
J : /J, K : /KU, /KC, /KU/KC, R : /RAM, /RL, /RD, /LB,
WY : /WY

(19) The part number of the flash ROM and system controller [* * * * * * / * * * * * * * *]

① Part number of the flash ROM <Front>
(Example) VYW1536-A = W1536A
(Example) PD6256A9 = 6256A9

② Part number of the system controller <Back>
(Example) PD3381T1 = 3381T1

(20) ① Version of the flash ROM [V : * . * * *]

② Flash ROM size [FLSH = *]

(21) Revision of the system controller [S : * . * * * / * . * *]

① Revision number of the external ROM part (flash ROM) of the system controller <Front>

② Revision of the internal ROM part of the system controller <Back>

(22) Revision of the DVD mechanism controller [M : * . * * *]

Revision number of the external ROM part (flash ROM) of the DVD mechanism controller

(23) Control and part numbers of the GUI-ROM [GUI : * * * *]

No GUI model displays as "—— / ——".
OEM model displays the part number of GUI-ROM
[GUI : * * * *]

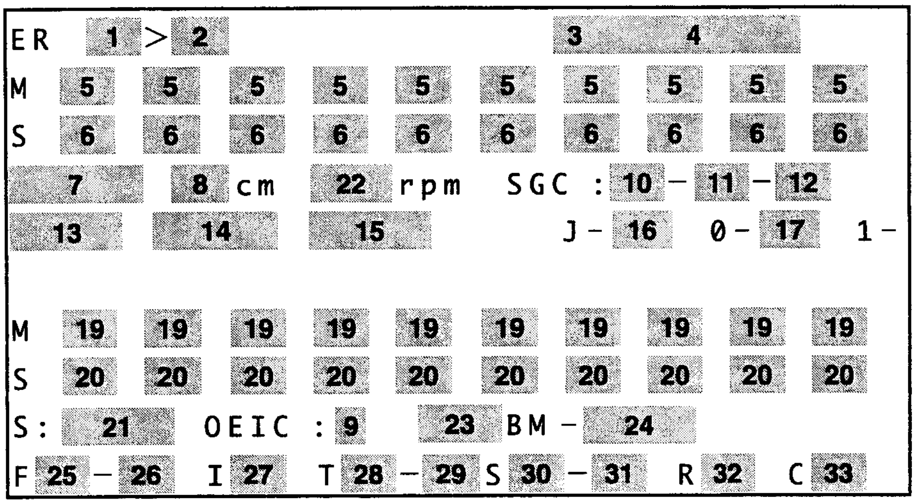
■ DEBUGGING SCREEN SPECIFICATION FOR THE MECHANISM CONTROLLER

- This specifications is subject to change without notice.

① Indication Method of The Mechanism Controller Debugging Screen

A debugging screen of the mechanism controller is indicated when pressing the test mode remote control unit [GGF1067] in order of the ESC and CHP/TM buttons.
Releace from debugging screen display of the mechanism controller with the ESC button.

② Screen Layout



```
ER  1 > 2                              3    4
M   5    5    5    5    5    5    5    5    5    5
S   6    6    6    6    6    6    6    6    6    6
   7      8 cm   22 rpm   SGC : 10 - 11 - 12
  13       14      15         J - 16   0 - 17   1 -

M  19   19   19   19   19   19   19   19   19   19
S  20   20   20   20   20   20   20   20   20   20
S :  21    OEIC : 9    23 BM -  24
F 25 - 26  I 27  T 28 - 29 S 30 - 31  R 32  C 33
```

③ Indication Contents

1. The error that became the trigger that an error of 2 occurred.
   There are many cases same as 2.

2. The error number that transferred to the system controller
   Refer to the error list about contents of error number.

3. Code read in state (it does not support in this unit)
   When X is indicated, ID or subcode are not able to read in.
   When X is not indicated, they are able to read in.

4. ID or subcode (it does not support in this unit)
   Subcode indicates the A time.

5. Inside mode of the mechanism controller when an error of 1 occurred
   It can indicate to a maximum 10 mode. Indicate it in order of an old mode from the left, and go right, and become a new mode. Indicate only a nest share of the mode.

6. Processing step of inside mode of 5
   It can grasp the mode reaching an error and transition of step by watching 5 and 6 and it can specify the occurrence place of most errors.

7. Disk information in the mechanism controller
   ? : Indistinctness
   NO : There is no disc
   DVD 1 : DVD single layer
   DVD 2 : DVD dual layer
   CD : CD
   CDR : CD-R or CD-RW
   CDR P : PRD of CD-R or CD-RW

8. As a result of 8cm /12cm distinction
   ? : Indistinctness (undistinction)
   8 : 8 cm
   12 : 12 cm

9. OEIC gain (it does not support in this unit)
   H : OEIC HIGH gain
   L : OEIC LOW gain

10. SGC gain for LD of 780nm
    It indicates a step using in the mechanism controller inside with a hexadecimal number.
    Set the gain so that S curve becomes 1.8V (p-p) in disc distinction.

11. SGC gain for LD of 650nm For L0.
    It indicates a step using in the mechanism controller inside with a hexadecimal number. Set a gain so that S curve becomes 1.8V (p-p) in disc distinction.

12. SGC gain for LD of 650nm For L1.
    It indicates a step using in the mechanism controller inside with a hexadecimal number. Set a gain so that a S curve becomes 1.8V (p-p) in disc distinction.

13. RF count value for disc distinction
    RF count value to use the disc distinction. It compares threshold value of 14 and 15 and distinguishes the disc.

14. Disc distinction threshold value (DVD and CD)
    Threshold value of the disc distinction. Distinguish it from DVD if bigger than this value, and distinguish it from CD if small.

15. Disc distinction threshold value (CD and unrecorded disc)
Threshold value of the disc distinction. Distinguish it from CD if bigger than this value, and distinguish it from an unrecorded disc if small.

16. Current jitter value
Indicate the value that was read in from the MY-CHIP in DVD, and indicate the value that was read in from the servo DSP in CD.

17. Focus balance setting value of L0

18. Focus balance setting value of L1

19. Current mechanism controller inside mode
(it does not support in this unit)
It can indicate to a maximum 10 modes. Indicate only a nest share of the mode.

20. Processing step of 11 inside modes
(it does not support in this unit)
It can grasp the current mode, the mode reaching it and transition of step by watching 19 and 20.

21. Spindle control state of MY-CHIP
(it does not support in this unit)
OFF : Motor off condition
A/B : Accelerator and brakes
FG : FG servo
RVP : Rough speed phase servo
ORVP : Rough speed phase servo of offset addition

22. Rotation number of spindle motor
Do not FG read in ? indication (during spindle stop).

23. Tracking error generation system
(it does not support in this unit)
1: 1 beam (DPD)
3: 3 beams

24. TZC count value (it does not support in this unit)
The value that counted the number of TZC for one rotation in the tracking open state.
When this value is more than 512 with CD, set it in 1 beam because the eccentric is large.
DVD does not measure it because it is 1 beam fixed (indication is 0000).

25. It indicates the frequency that entered the focus backup
Hexadecimal number indication. Counter does not reset till turns the power off after turning it on. Due to a 1 byte counter, next of FF becomes 00.

26. It indicates focus backup limit frequency with the hexadecimal number
Initial value is 14H, it does decrement whenever enter the focus backup and it gives up backup if it became 0. Then the error is generated. After reverted from the backup, When not enter the backup and pass fixed time (1500ms), return to initial value again.

27. It indicates the frequency that entered the internal circumference plunging into backup of the sled
Hexadecimal number indication. Counter does not reset till turns the power off after turning it on. Due to a 1 byte counter, next of FF becomes 00.

28. It indicates the frequency that entered the tracking overrun backup
Hexadecimal number indication. Counter does not reset till turns the power off after turning it on. Due to a 1 byte counter, next of FF becomes 00.

29. It indicates the limit frequency of tracking overrun backup with a hexadecimal number
Initial value is 03H, it does decrement whenever enter the tracking overrun backup and it gives up backup if it became 0.

30. It indicates the frequency that entered sled overrun backup
Hexadecimal number indication. Counter does not reset till turns the power off after turning it on. Due to a 1 byte counter, next of FF becomes 00.

31. It indicates the limit frequency of sled overrun backup with a hexadecimal number
Initial value is 03H, it does decrement whenever enter the sled overrun backup and it gives up backup if it became 0.

32. It indicates the frequency that entered the tracking close NG backup
Hexadecimal number indication. Counter does not reset till turns the power off after turning it on. Next of FF is be a 1 byte counter in 00.
The hexadecimal number indication which indicates the frequency that reads

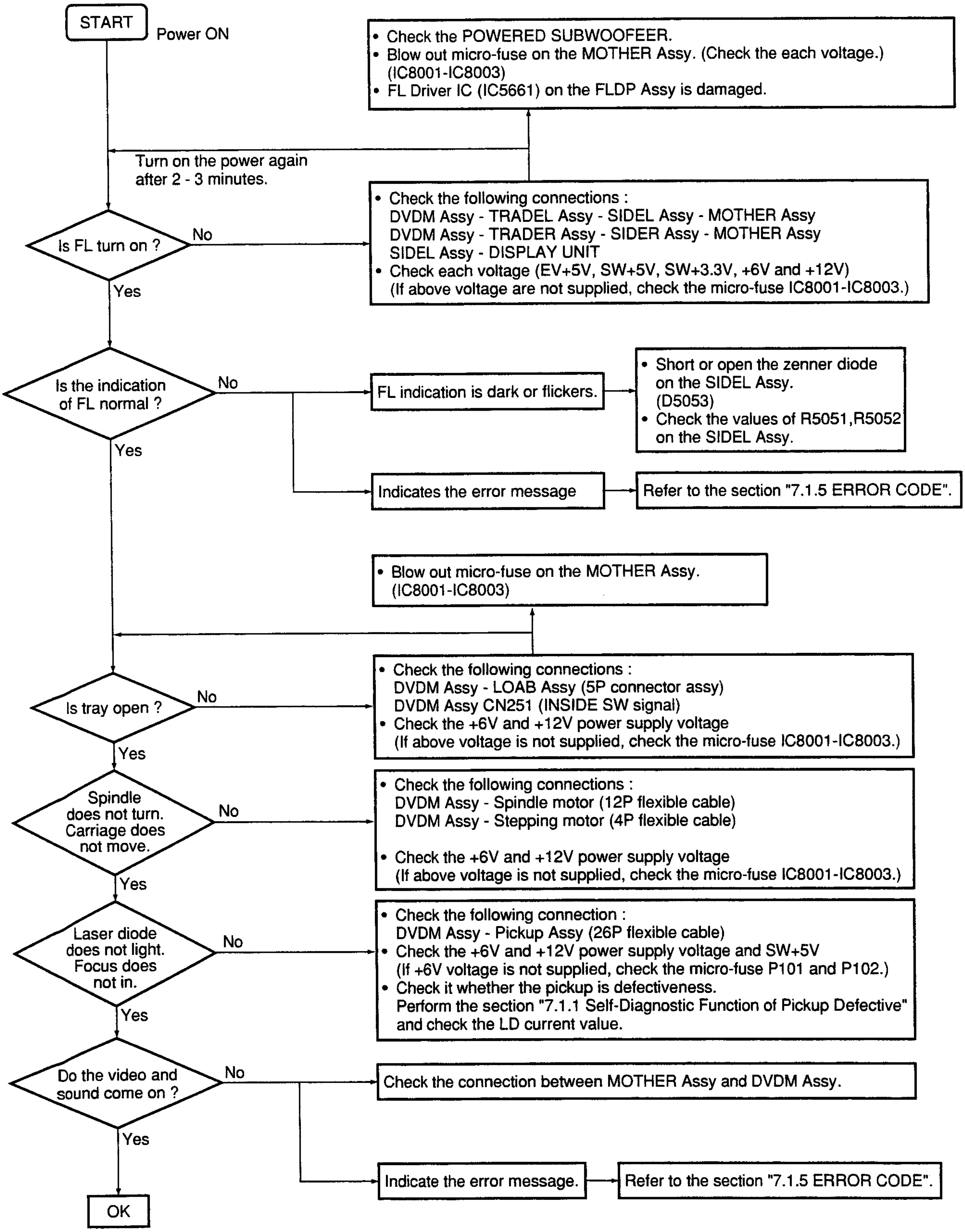
33. ID/subQ, and entered NG backup
Hexadecimal number indication. A counter does not reset it till cuts it off after turning it on. Due to a 1 byte counter, next of FF becomes 00.

34. An address to indicate in 35
Set it by using RS232.I
(an address) Set it with DA.

35. Contents of an address indicated in 34.

7.1.4 TROUBLE SHOOTING

- No Power ON
- FL is not turned ON
- FL indication is unusual


START
Power ON
• Check the POWERED SUBWOOFEER.
• Blow out micro-fuse on the MOTHER Assy. (Check the each voltage.) (IC8001-IC8003)
• FL Driver IC (IC5661) on the FLDP Assy is damaged.
Turn on the power again after 2 - 3 minutes.
Is FL turn on ?
No
Yes
• Check the following connections :
DVDM Assy - TRADEL Assy - SIDEL Assy - MOTHER Assy
DVDM Assy - TRADER Assy - SIDER Assy - MOTHER Assy
SIDEL Assy - DISPLAY UNIT
• Check each voltage (EV+5V, SW+5V, SW+3.3V, +6V and +12V)
(If above voltage are not supplied, check the micro-fuse IC8001-IC8003.)
Is the indication of FL normal ?
No
Yes
FL indication is dark or flickers.
• Short or open the zenner diode on the SIDEL Assy. (D5053)
• Check the values of R5051,R5052 on the SIDEL Assy.
Indicates the error message
Refer to the section "7.1.5 ERROR CODE".
• Blow out micro-fuse on the MOTHER Assy. (IC8001-IC8003)
Is tray open ?
No
Yes
• Check the following connections :
DVDM Assy - LOAB Assy (5P connector assy)
DVDM Assy CN251 (INSIDE SW signal)
• Check the +6V and +12V power supply voltage
(If above voltage is not supplied, check the micro-fuse IC8001-IC8003.)
Spindle does not turn. Carriage does not move.
No
Yes
• Check the following connections :
DVDM Assy - Spindle motor (12P flexible cable)
DVDM Assy - Stepping motor (4P flexible cable)
• Check the +6V and +12V power supply voltage
(If above voltage is not supplied, check the micro-fuse IC8001-IC8003.)
Laser diode does not light. Focus does not in.
No
Yes
• Check the following connection :
DVDM Assy - Pickup Assy (26P flexible cable)
• Check the +6V and +12V power supply voltage and SW+5V
(If +6V voltage is not supplied, check the micro-fuse P101 and P102.)
• Check it whether the pickup is defectiveness.
Perform the section "7.1.1 Self-Diagnostic Function of Pickup Defective" and check the LD current value.
Do the video and sound come on ?
No
Yes
Check the connection between MOTHER Assy and DVDM Assy.
Indicate the error message.
Refer to the section "7.1.5 ERROR CODE".
OK

7.1.5 ERROR CODE

Error codes that are displayed on the FL display without using the remote control unit

FL Display	Possible causes	Operation of the unit
AV1 VER	AV-1 chip is not a match with the program of system controller	The sound may not out with the specific audio.
CPU AERR	CPU address error (Hardware is unusual.)	No operation
DMA AERR	DMA address error (Hardware is unusual.)	No operation
FLASH ID	Difference in versions of the internal ROM of the system controller and of the flash ROM, or bus line failure or reverse installation	No operation
FLASH WRP	Write protect error of the flash ROM	No operation
FLASH SIG	Difference in part number of the flash ROM (When the ROM which could't be used was used.)	No operation
FLASH SUM	Check sum error of the flash ROM (It exceeds the regular size.) or reverse installation (Hardware is unusual.)	No operation
FLASH SIZE	Size error of the flash ROM (Use 4 or 8 M-bit.)	No operation
ILLGAL	The system controller fetched a code other than an operation code (Hardware is unusual.)	No operation
RESERVE	Undefined interrupt (Hardware is unusual.)	No operation
SLOT	Inappropriate slot command issued (Hardware is unusual.)	No operation
SDSP PWER	Access error to the servo DSP or clock does not oscillation (Hardware is unusual.)	Accept only OFF operation of the POWER key of the main unit. Remote control unit is impossible.

Error codes that are displayed on the FL display by using the remote control unit (Mechanism controller error)

To display: ESC + DISPLAY + DISPLAY; Location of the display: At the two digits of center of the FL display

To display the error history: ESC + DISPLAY + One shot; Location of the display: TV screen

FL	Description of Error	Causes if with a DVD	Causes if with a CD	Operation of the Unit
11	Search timeout	Search could not be complete within 7 seconds.	Search could not be complete within 7 seconds, and it could not enter the target area within 7 seconds by VCD scan.	CD : Stops, DVD : Continues operation
12	Search retry error	A search could not be completed after 3 retries, search backup was executed 4 times, or in a case of timeout (6 seconds) while the unit was tracing 11 tracks or more beyond the target while the search operation was converging.	Backup against slider skip was executed 4 times during a search, or slider skip twice resulted in starting from the read-in point.	CD : Stops, DVD : Continues operation
19	Tracing timeout while converging	Timeout (10.5 seconds) while tracing at the stage of convergence of a search.		Stop
1B	Index 0 search error		During Track (Index) Search, the search for the beginning of a program could not be completed within 3 seconds (20 seconds in the case of Index Search) after positioning based on the TOC data was completed.	Stop
1C	Wobble distinction error	Distinguished RW disc without wobble.		Read the RW control data.
22	Timeout of slider inner circumference	Inside switch could not ON within 3 seconds.		Stop
23	Timeout of slider outer circumference	Inside switch could not OFF within 2 seconds.		Stop

FL	Description of Error	Causes if with a DVD	Causes if with a CD	Operation of the Unit
33	No FOK pulse during playback CLVA	When the focus was deviated continuously 20 times.		Adjusts focus at the innermost circumference and tries to return to its position where the error was generated (for 3 times),then opens. If the same error persists after one retry, the tray opens. (No FOK pulse)
38	Disc-type-sensing error	If normal starting was impossible in the following three cases, disc-type sensing will be retried if other errors occure excepting C5 error. However, when the focus error "33" was occured continuously 3 times, it is finished as "38 error" at the moment: (1) startup with the first disc-type-sensing result, (2) forced startup with another disc by designating the disc type, (3) forced startup with the original disc by designating the disc type.		Open
39	SGC converge timeout	SGC could not converge during detects the peak		Open
41	Spindle timeout	The unit did not enter Stop mode within 10 seconds of issuance of a Stop command.		Stop
48	Spindle FG transition timeout	The spindle could not converge into within ± 12% of the target FG rotation speed within 10 seconds after spindle kick. The first time after startup (the first time after disc distinction), it doesn't become the number of the target rotation within five seconds. The first time after startup, detects the abnormal rotation number of high-speed continuously 3 loops. DVD: 5 to 9 mS , CD: 40 to 60 mS		Stops. (FG timeout)
49	Spindle PLL transition timeout	After the second times after startup, it doesn't become the number of the target rotation within five seconds. Detects the abnormal high-speed or low-speed rotations. DVD: 5 to 9 mS , CD: 40 to 60 mS		Stops. ("73" is displayed during starting process.)
4A	Spindle lock timeout	Spindle could not lock more than 1.5 seconds before start the AFB.		Stops. ("73" is displayed during starting process.)
51	Auto sequence timeout of peak detection	ABUSY did not return within 1 second after the DDTCT (peak detection) command was sent.		Stop
52	Auto sequence timeout of focus jump down	ABUSY did not return within 30 mS after the FJMPD (Focus jump 1 to 0) command was sent.		Stop
53	Auto sequence timeout of focus jump up	ABUSY did not return within 30 mS after the FJMPU (Focus jump 0 to 1) command was sent.		Stop
54	Auto sequence timeout of play AGC	ABUSY did not return within 50 mS after the GSUMON (play-AGC-measuring) command was sent.		Stop
55	Auto sequence timeout of disc-type-sensing	ABUSY did not return within 2 seconds after the DJSRT (disc-sensing) command was sent.		Stop
56	Auto sequence timeout of ATB2	ABUSY did not return within 1 second after the TBLOFS (Internal ATB after the completion of external ATB) command was sent.		Stop
57	Auto sequence timeout of tracking servo ON	ABUSY did not return within 500 mS after the TSON (tracking servo ON) command was sent.		Stop
58	Auto sequence timeout of ATB1	ABUSY did not return within 200 mS after the TBL (external ATB) command was sent.		Stop
59	Auto sequence timeout of focus gain adjustment	ABUSY did not return within 2 seconds after the FGN (focus gain adjustment) command was sent.		Stop
5A	Auto sequence timeout of tracking gain adjustment	ABUSY did not return within 2 seconds after TGN (tracking gain adjustment) command was sent.		Stop
5B	Auto sequence timeout of offset adjustment	ABUSY did not return within 1 second after the CMDAVE (offset adjustment) command was sent.		Stop

FL	Description of Error	Causes if with a DVD	Causes if with a CD	Operation of the Unit
5C	Auto sequence timeout of modulation factor measurement	ABUSY did not return within 200 mS after the ADJMIR (modulation factor measurement) command was sent.		Stop
5D	Auto sequence timeout of auto focus bias	ABUSY did not return within 2 seconds after the AFB (auto focus bias) command was sent.		Stop
5F	Auto sequence already busy	A command could not be sent because ABUSY was low. ABUSY did not return within 200 mS after TLV command was sent.		Stop
62	Pause retry error	Pause mode could not be restored within three retries after it had been released.		Continues operation
71	ID can not read during tracing	An ID could not be read for 1 second or more.		Stop
72	Subcode check failure during playback		No frame could be read for 3 seconds or more.	Stop
73	ID can not read at the startup	An ID could not be read within 1 second after the AFB adjustment had been finished.		Opens (ID readout failure)
74	Subcode check failure during startup		No subcode could be read within 3 seconds after AFB adjustment had been finished.	Opens (Subcode readout failure).
81	Timeout for reading TOC of the mechanism controller		TOC readout took 30 seconds or more.	Stop
82	Timeout for reading TOC of the system controller		Reading TOC of the system controller took 30 seconds or more.	Stop
A1	Communication timeout of DSP command	A command could not be issued to DSP because Command Busy (XCBUSY) was in force (XCBUSY = L) for a specified time (about 200 mS).		Open
A2	Communication timeout for reading DSP coefficient	Command Busy (XCBUSY) was in force for a specified time (about 200 mS) before and after a coefficient read command was issued to DSP, or the address echo-back after command issuance did not match the setup address.		Open
A3	Communication timeout for writing DSP coefficient	Command Busy (XCBUSY) was in force for a specified time (about 1024 mS) before and after the coefficient write command was issued to DSP.		Open
A4	Communication timeout for continuously writing DSP coefficient	Command Busy (XCBUSY) was in force for 200 µS during continuous coefficient writing, or before and after a continuous write command was issued to DSP.		Open
B1	Timeout error for backup	In the tracing state during the backup sequence, codes could not be read for 1 second or more. In the backup sequence, tracking ON sequence of the servo DSP could not be completed even if more than 500 mS after the tracking ON command was issued.		Stops
B2	Retry error for backup	Tracing impossible after retring the tracking ON for 3 times in the backup sequence.		Stops
B3	Retry error for trace	During tracing, runaway was detected after three iterations of backup operations for detecting runaway.		Stops
C3	Detection of tracking overcurrent	During playback, the overcurrent detection port was at L for 300 ms or more continuously.		Stops (the mechanical controller operates independently).
(C5)	Short-circuit test corresponding error	While the power was on, the overcurrent detection port was at L for 40 ms or more continuously.		Turns off the power instantly (No indication on the FL display and no writing to flash memory)
E3	Violation against digital copy guard			Stops

FL	Description of Error	Causes if with a DVD	Causes if with a CD	Operation of the Unit
F5	Tray being pushed	The tray switch that had been Open mode was forcibly changed to a mode other than Open by an external force.		Closes
F8	Loading timeout	Loading, unloading or clamping could not be completed within a specified time (about 5 seconds).		Reverses the loading direction. It timeout is repeated upon retry, the unit stops.
FC	Focus	The following error occured eight times. (1) Focus ON sequence could not be completed even if more than two seconds after the focus ON command (to the servo DSP) was sent. (2) Focus IN sequence was finished, actually focus IN was not completed.		Stops wherever possible then opens (stops in the case of side B).

Error codes that are displayed on the FL display by using the remote control unit (Device error)

To display : ESC + DISPLAY + DISPLAY ; Location of the display : At the two digits of left of the FL display

FL	Description of Error	Causes if with a DVD	Causes if with a CD	Operation of the Unit
bit3=1 08 etc.	AV1 access error (read, write NG)			No operation or it becomes debugging indication if the power is able to ON.
bit2=1 04 etc.	MY CHIP access error			
bit1=1 01 etc.	SRAM access error			

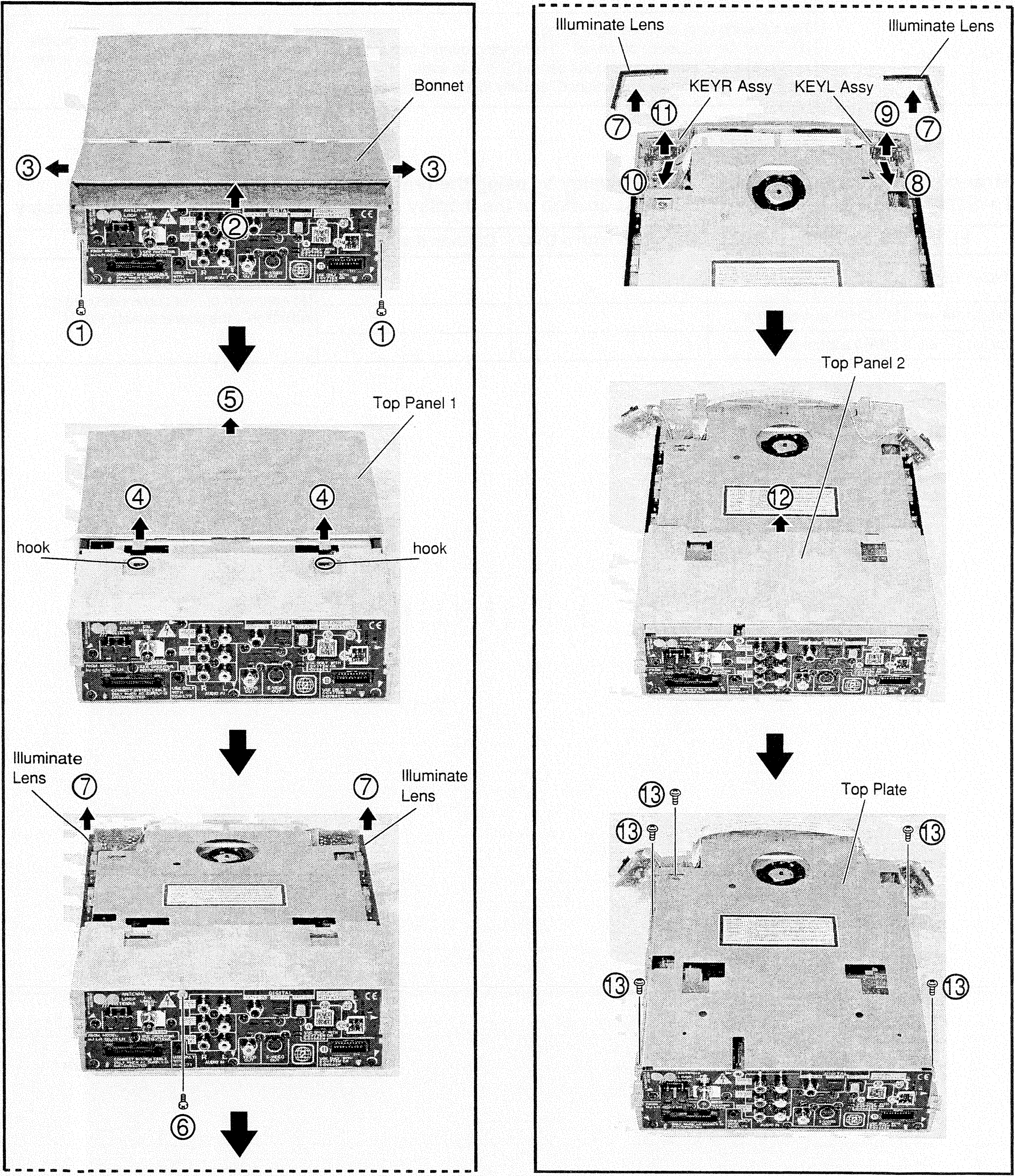
7.1.6 DISASSEMBLY

■ DIAGNOSIS OF PCBs

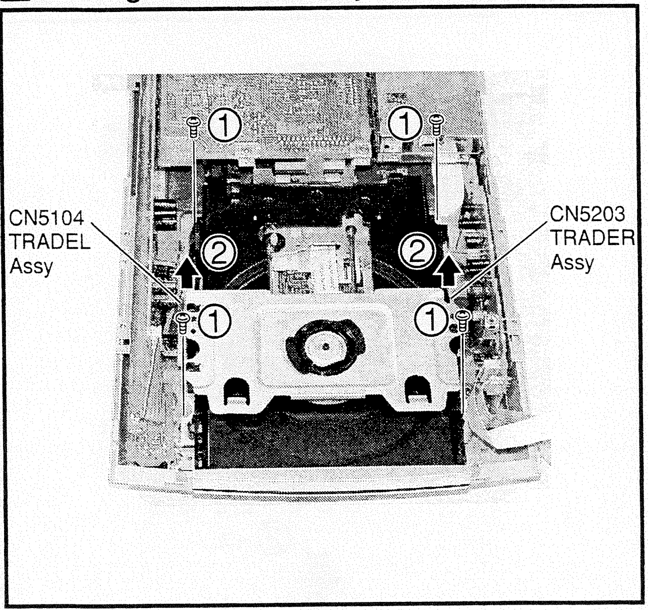
Note

When diagnosing the unit, be sure to use two connection cables for service. (Part No. : GGD1228)

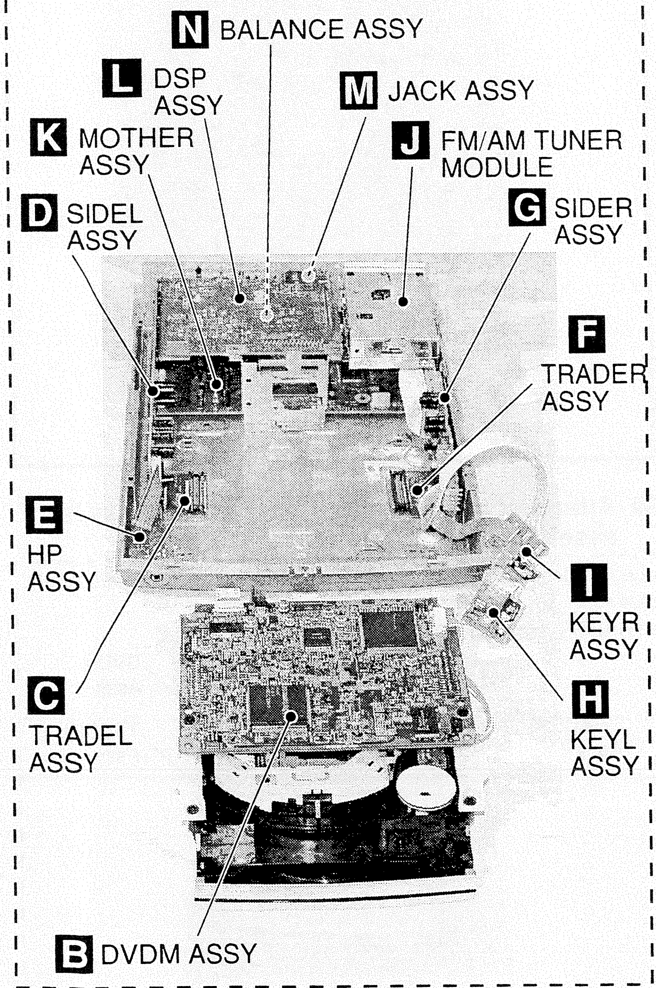
1 Bonnet, Top Panel 1, Top Panel 2 and Top Plate


Bonnet
③
③
②
①
①
⑤
Top Panel 1
④
④
hook
hook
Illuminate Lens
⑦
⑦
Illuminate Lens
⑥
Illuminate Lens
Illuminate Lens
KEYR Assy
KEYL Assy
⑦
⑪
⑨
⑦
⑩
⑧
Top Panel 2
⑫
Top Plate
⑬
⑬
⑬
⑬
⑬
⑬

2 Loading Mechanism Assy


①
①
CN5104
TRADEL
Assy
CN5203
TRADER
Assy
②
②
①
①

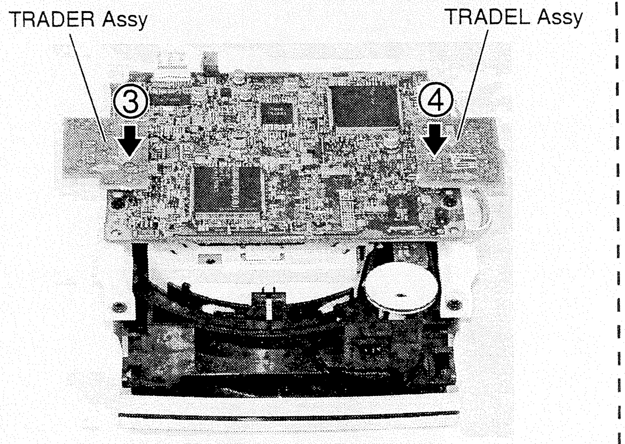
● PCB Location

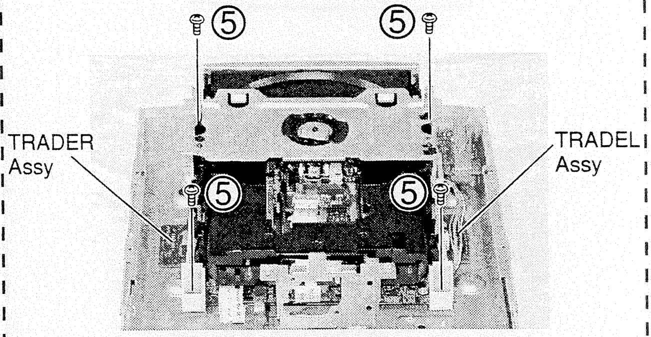

N BALANCE ASSY
L DSP ASSY
M JACK ASSY
K MOTHER ASSY
J FM/AM TUNER MODULE
D SIDEL ASSY
G SIDER ASSY
F TRADER ASSY
E HP ASSY
I KEYR ASSY
C TRADEL ASSY
H KEYL ASSY
B DVDM ASSY

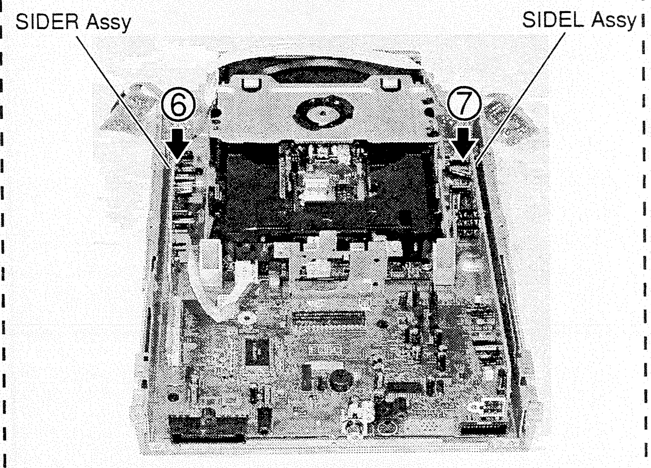
● Assembly

① Remove SIDEL ASSY and SIDER ASSY.

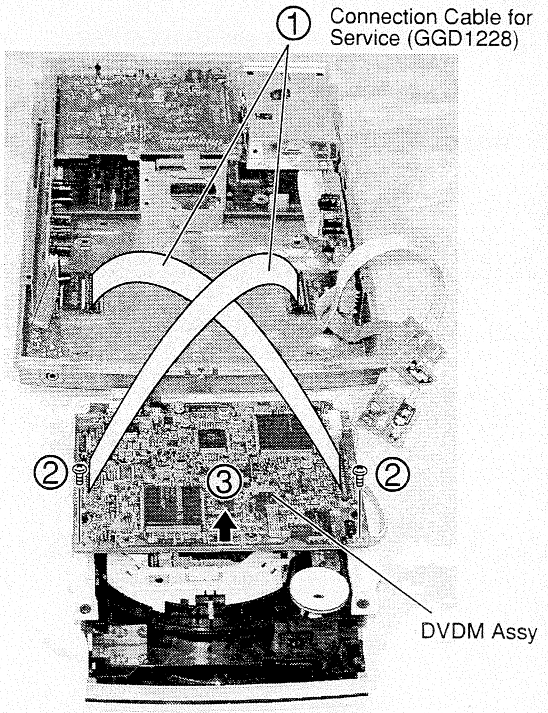
② Remove TRADEL ASSY and TRADER ASSY.

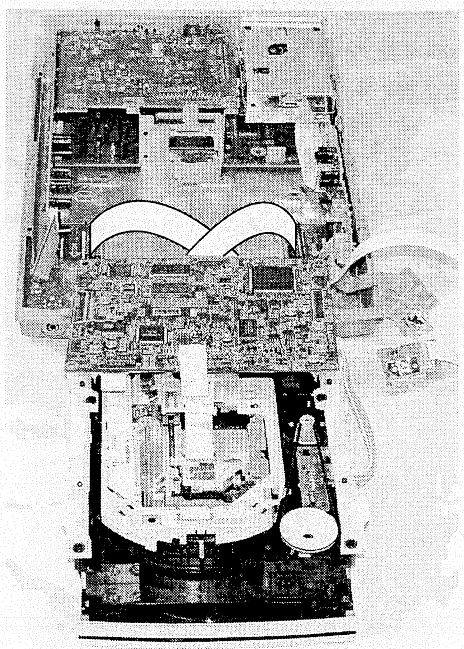

TRADER Assy
TRADEL Assy
③
④


⑤
⑤
TRADER
Assy
TRADEL
Assy
⑤
⑤


SIDER Assy
SIDEL Assy
⑥
⑦

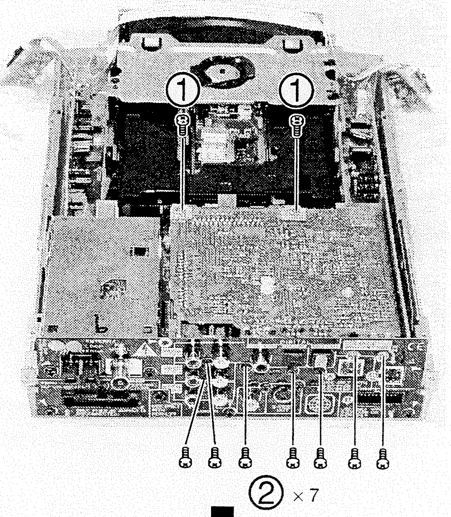
3 Diagnosis of DVDM Assy

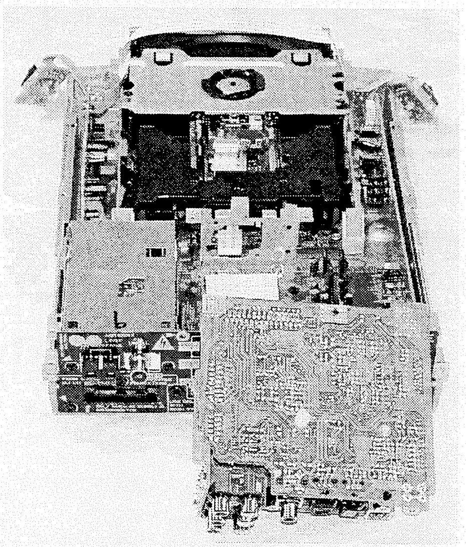

① Connection Cable for Service (GGD1228)
②
③
②
DVDM Assy



Diagnosis

4 Diagnosis of DSP, JACK and BALANCE Assys



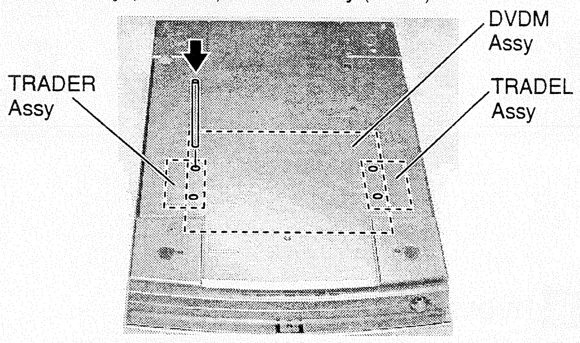


Diagnosis

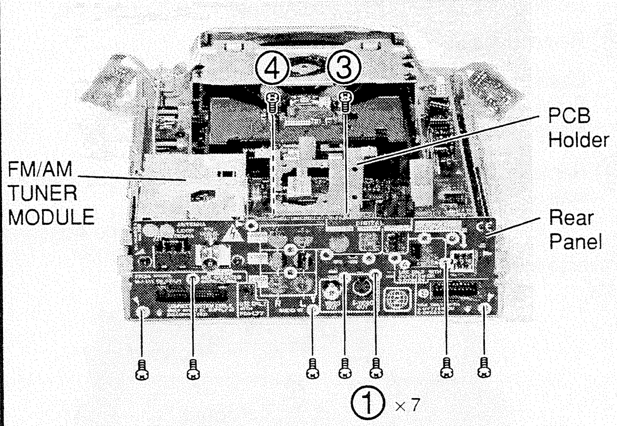
● Attention when Loading Mechanism Assy is assembled

Letting uses four hole of bottom face and insert connectors surely.

TRADEL Assy (CN5104) - DVDM Assy (CN401)
TRADER Assy (CN5203) - DVDM Assy (CN15)

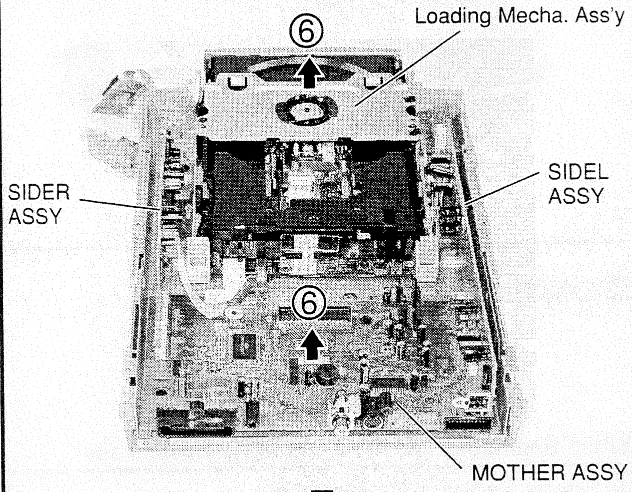

DVDM Assy
TRADER Assy
TRADEL Assy

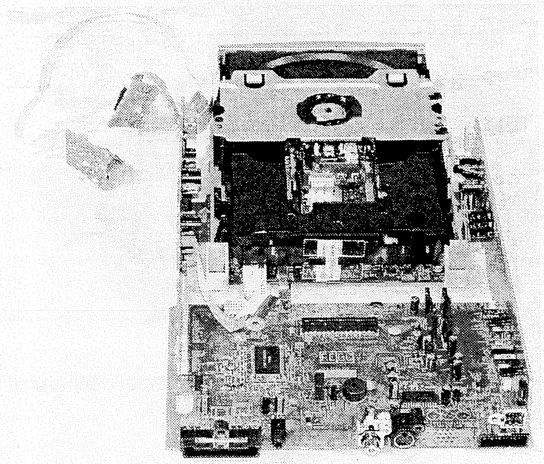
5 MOTHER Assy


④
③
PCB Holder
FM/AM TUNER MODULE
Rear Panel
① × 7

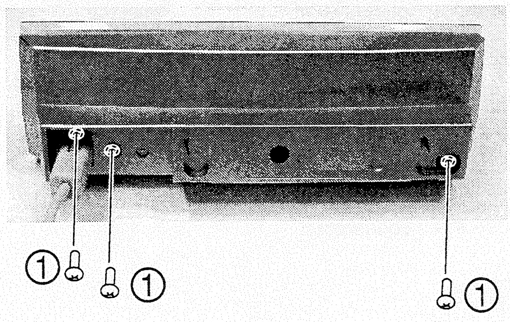
② Remove Rear Panel and FM/AM TUNER MODULE.

⑤ Remove PCB Holder.


⑥
Loading Mecha. Ass'y
SIDER ASSY
SIDEL ASSY
⑥
MOTHER ASSY



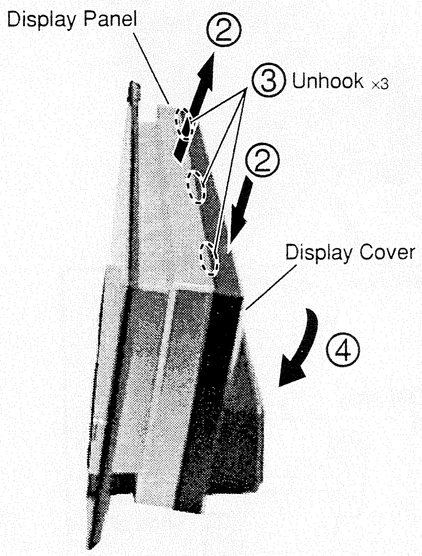
■ Display Unit

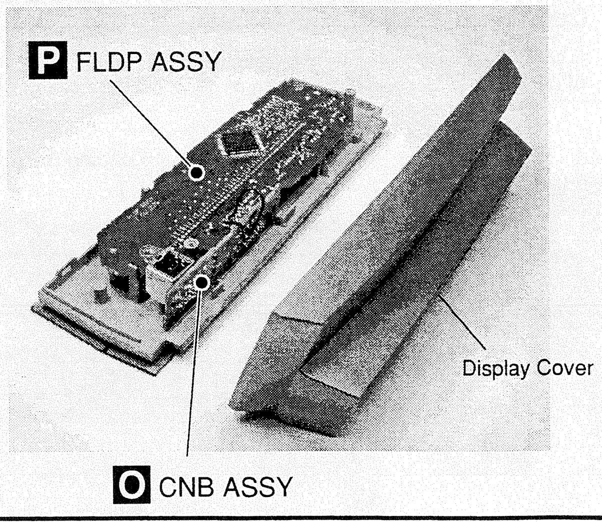


② Display Panel and Display Cover are vertically moved.

③ The hook three places of the upper part are removed.

④ Removes while rotating Display Cover in the direction of the arrow.


Display Panel
②
③ Unhook ×3
②
Display Cover
④


P FLDP ASSY
Display Cover
O CNB ASSY

Disassembly of the Traverse Mechanism Assy and the Pickup Assy

① Remove the Bonnet, Top Panel1, Top Panel2 and Top Plate.

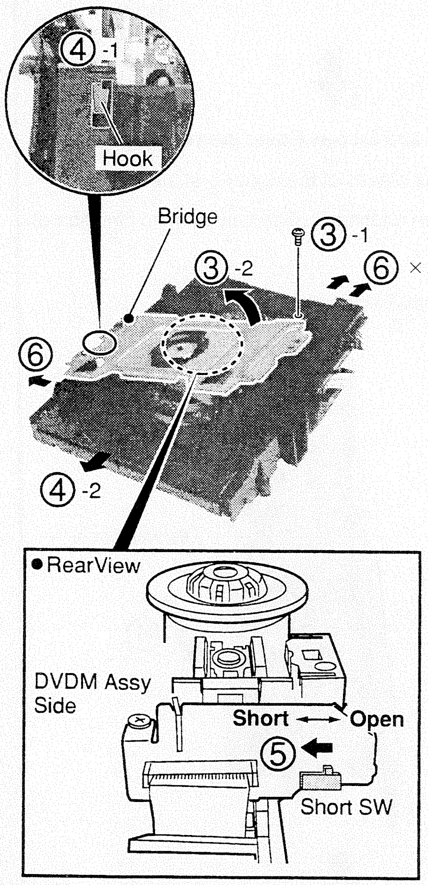
② Remove the Loading Mechanism Assy.

③ Remove the Bridge (Screw ×1).

④ Pull out the Tray and remove it while unhooking a Hook.

⑤ Turn the Short SW to Short side.

⑥ Remove three connectors.

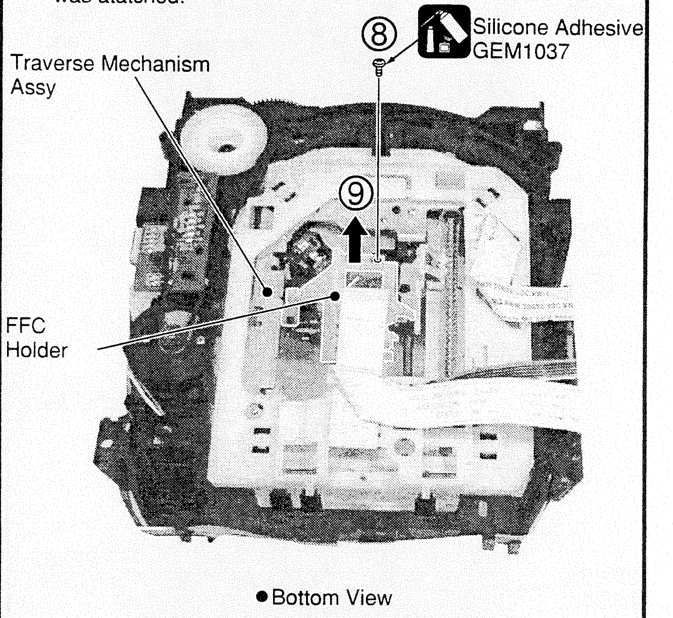

④-1
Hook
Bridge
③-1
③-2
⑥ × 2
⑥
④-2
● RearView
DVDM Assy Side
Short ←→ Open
⑤
Short SW

⑦ Remove the DVDM Assy (Screws ×2).
Remove the Adapter12 L and Adapter12 R (Screws ×4).

⑧ Remove a screw.

Cautions:
Screw is locked with Silicone Bond.
Please lock it with Silicone Bond when installs it.

⑨ Remove the FFC Holder with the state which Flexible Cable was atatched.


⑧
Silicone Adhesive
GEM1037
Traverse Mechanism Assy
⑨
FFC Holder
● Bottom View

Pickup Assy

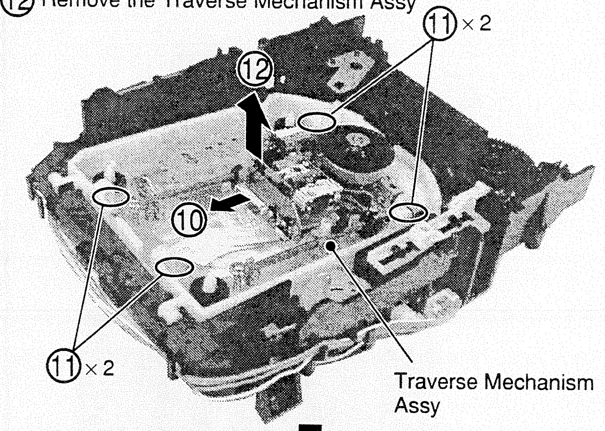
Traverse Mechanism Assy

● When Removing The Traverse Mechanism Assy

⑩ Remove the Pickup Flexible Cable

⑪ Unhook (×4)

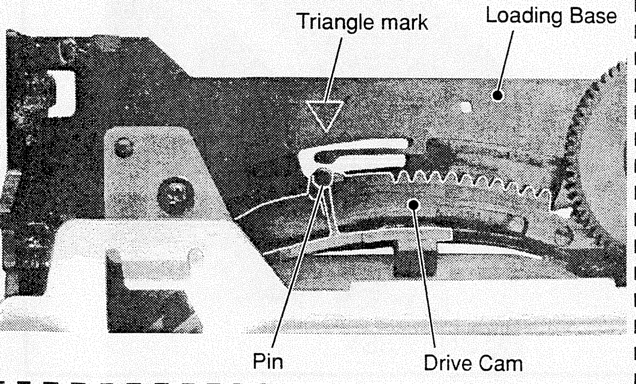
⑫ Remove the Traverse Mechanism Assy


⑪ × 2
⑫
⑩
⑪ × 2
Traverse Mechanism Assy

Exchange

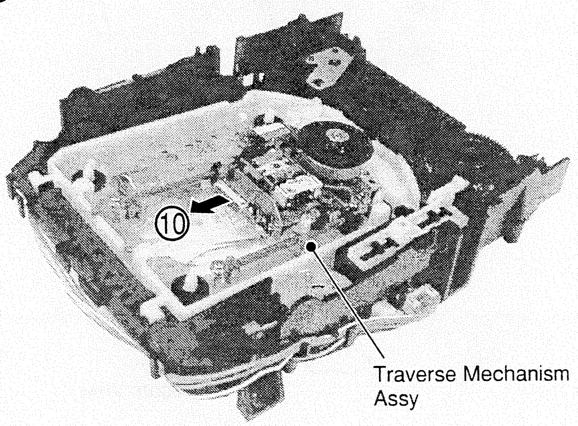
☞ Caution in the tray insertion

In the Tray insertion, insert it after matching a triangle mark of the Loading Base and a position of pin of the Drive Cam.


Triangle mark
Loading Base
Pin
Drive Cam

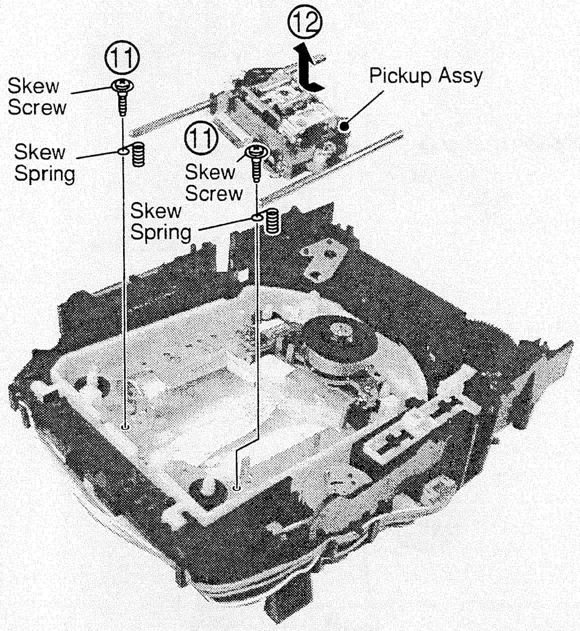
- **When Removing The Pickup Assy**

⑩ Remove the Pickup Flexible Cable.


⑩
Traverse Mechanism Assy

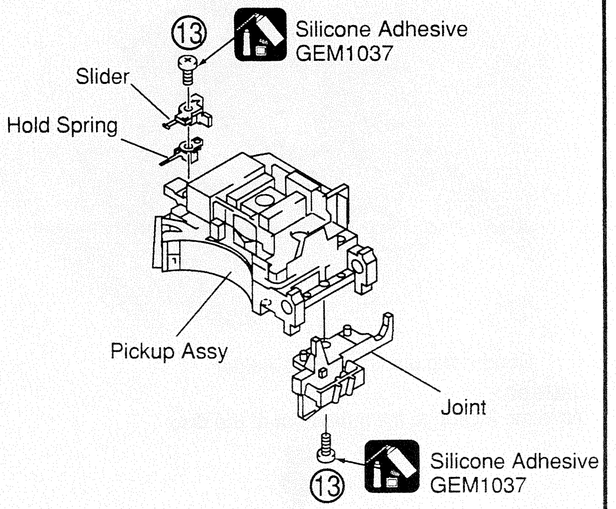
⑪ Remove two Skew Screws and two Skew Springs.

⑫ Remove the Pickup Assy.


⑫
⑪
Skew Screw
Pickup Assy
Skew Spring
⑪
Skew Screw
Skew Spring

⑬ Remove two screws.

Cautions:
Screw is locked with Silicone Bond.
Please lock it with Silicone Bond when installs it.

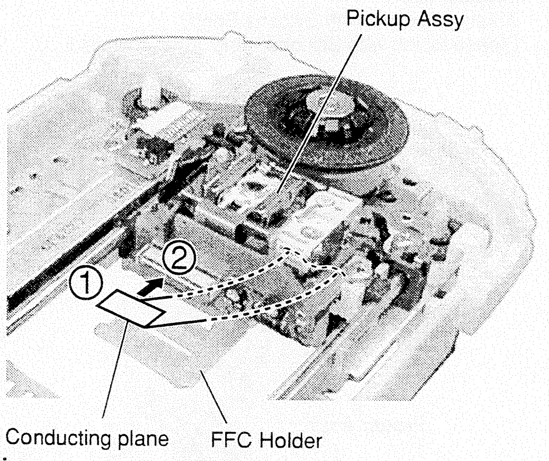

⑬
Silicone Adhesive GEM1037
Slider
Hold Spring
Pickup Assy
Joint
Silicone Adhesive GEM1037
⑬

Exchange

☞ Styling the Pickup Flexible Cable

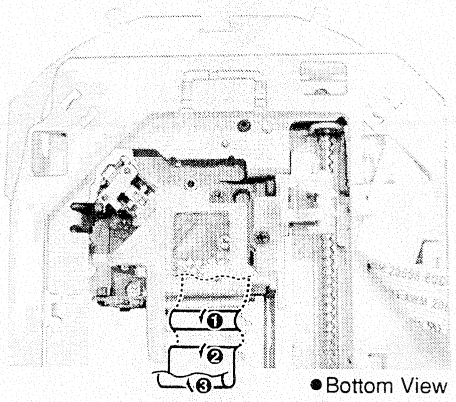
① Fold a edge of lining part of the Pickup Flexible Cable.

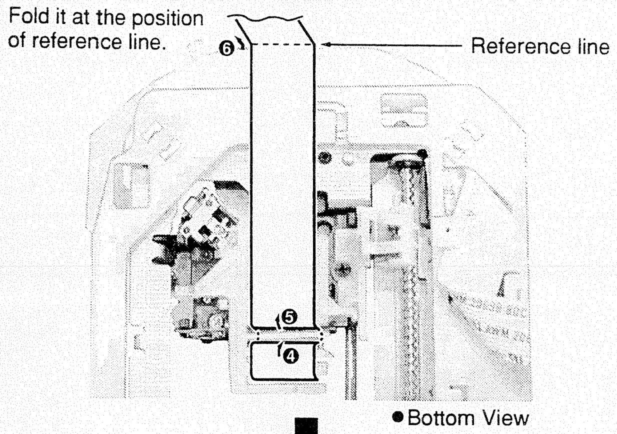
② Insert the Pickup Flexible Cable in connector, and lock it surely.

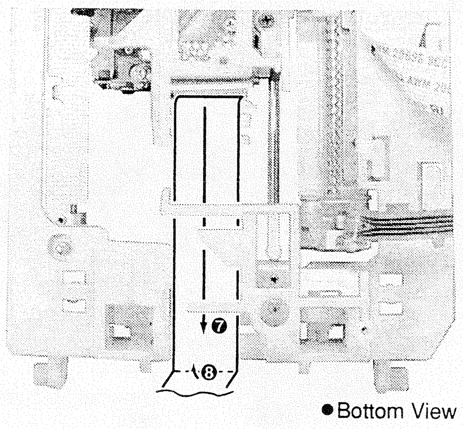

Pickup Assy
②
①
Conducting plane
FFC Holder

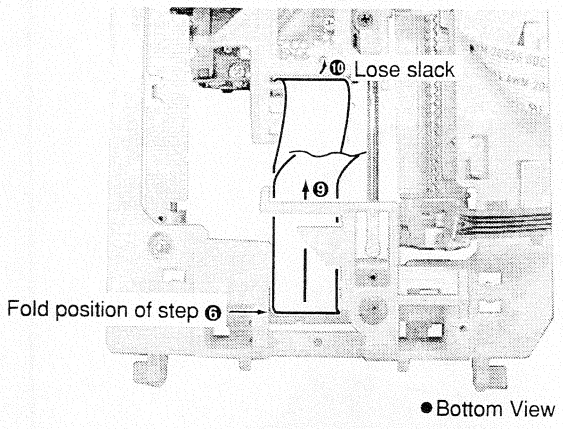
Caution:
Move the Pickup to the innermost of the disc.

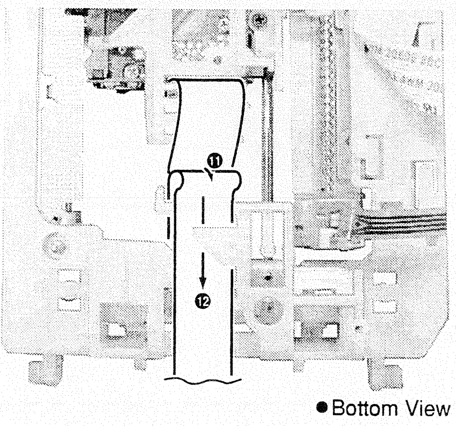
③ Perform the styling as shown in figure below.


❶
❷
❸
● Bottom View


Fold it at the position of reference line.
❻
Reference line
❺
❹
● Bottom View


❼
❽
● Bottom View

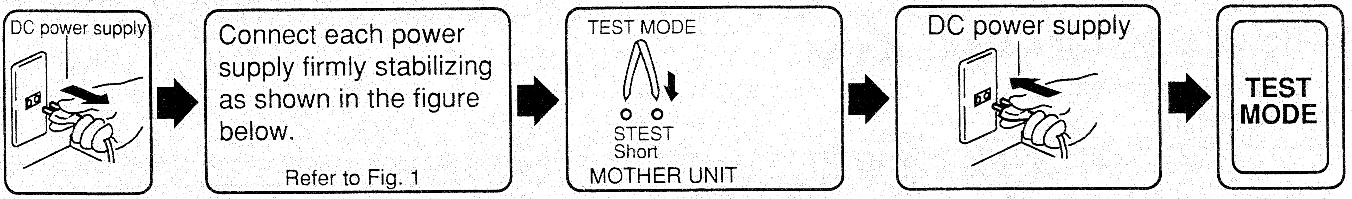

❿ Lose slack
❾
Fold position of step ❻
● Bottom View


⓫
⓬
● Bottom View

7.1.7 SINGLE OPERATION METHOD

- **FL display does not turn on, but please connect DISPLAY UNIT AXX7107 in order to use Remote Control Unit.**

TEST MODE : ON Service TEST mode. (STEST)


DC power supply
Connect each power supply firmly stabilizing as shown in the figure below.
Refer to Fig. 1
TEST MODE
STEST
Short
MOTHER UNIT
DC power supply
TEST MODE

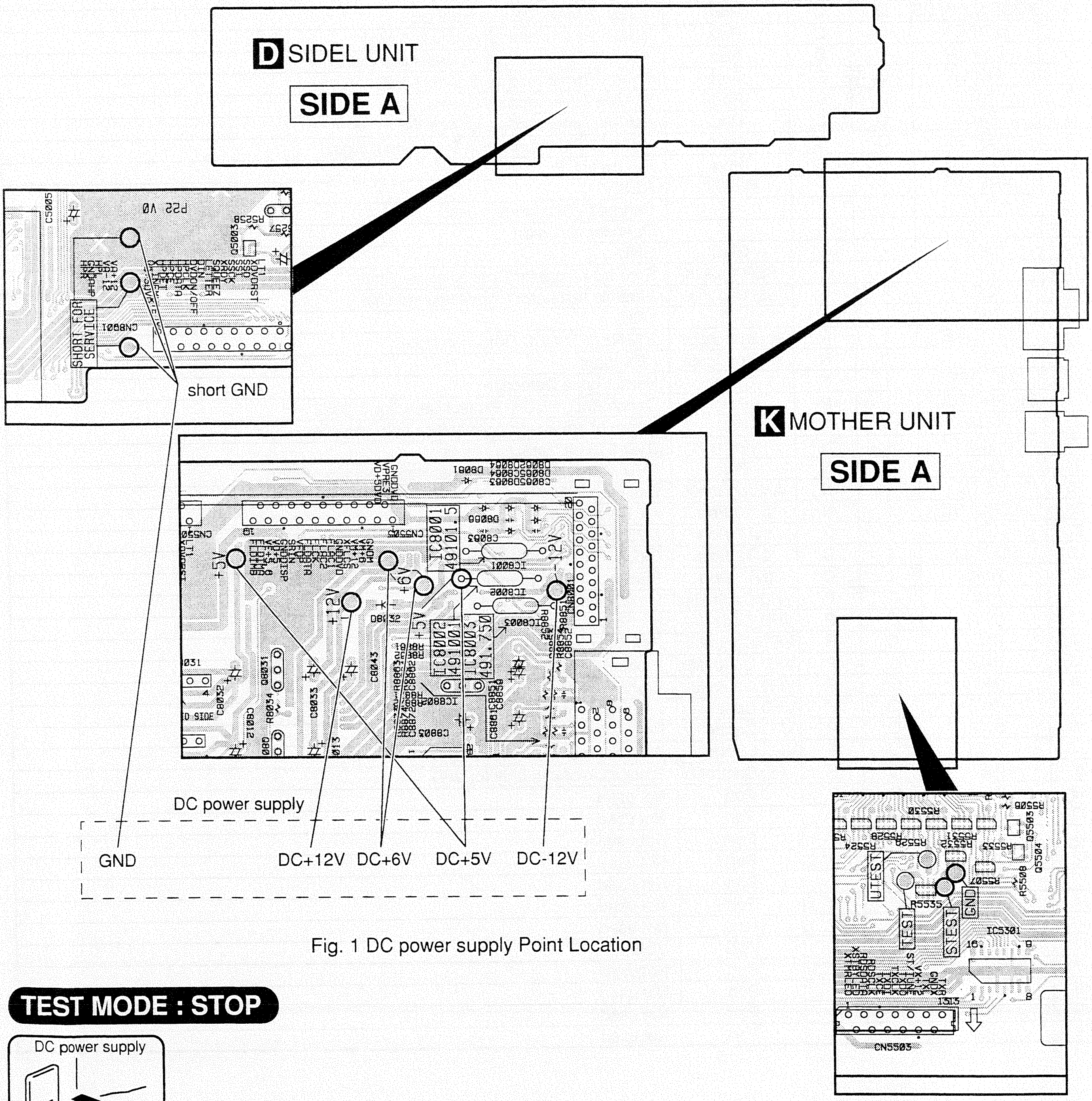
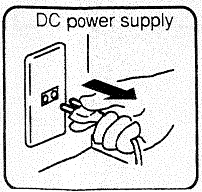

D SIDEL UNIT
SIDE A
K MOTHER UNIT
SIDE A
SHORT FOR SERVICE
CN8801
short GND
+5V
+12V
+6V
+5V
-12V
IC8001
DC power supply
GND
DC+12V
DC+6V
DC+5V
DC-12V
UTEST
TEST
STEST
GND
R5535
IC5301
CN5503

Fig. 1 DC power supply Point Location

TEST mode Short Point

TEST MODE : STOP


DC power supply

To come off the test mode, AC OFF.
The test mode is not completely cleared in POWER OFF key and AC OFF, please.

7.2 PARTS

7.2.1 IC

- The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

■ PDC080A (MOTHER UNIT : IC5501)

- **System Control IC**

● Pin Function

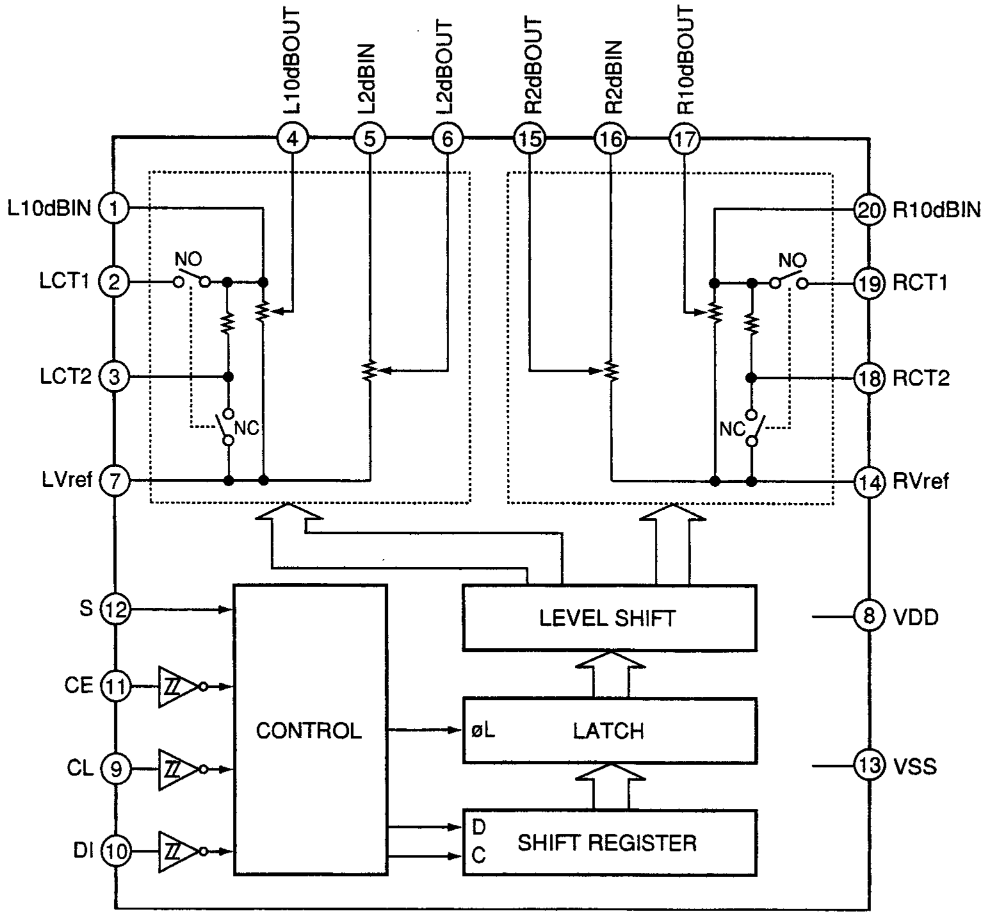
No.	Pin Name	I/O	MOS	Function	Pin Function
1	BEEP	O	C	Port	BEEP Output
2	XDSP SUB CS	O	C	Port	YSS912 SUB DSP Control CE
3	XDSP MAIN CS	O	C	Port	YSS912 MAIN DSP Control CE
4	DSP CK	O	C	Port	YSS912 Communication Clock Signal
5	DSP SI	I	C	Port	YSS912 Communication Data input Signal
6	TXCLK	O	C	Port	FM/AM Tuner module Control Clock
7	TXDI	O	C	Port	FM/AM Tuner module Control Data
8	TXCE	O	C	Port	FM/AM Tuner module Control CE
9	DSP SO	O	C	Port	YSS912 Communication Data output Signal
10	XFL CS	O	C	Port	FL Driver CE
11	XRESET	I	-	RESET	RESET
12	(NC)	-	-		Connect VDD1 for Not used
13	(NC)	-	-		Open for Not used
14	GND	-	-	GND	GND
15	CF1	-	-	SERALOCK	Seramic resonator Connected terminal
16	CF2	-	-	SERALOCK	Seramic resonator Connected terminal
17	VDD	-	-	VDD	VDD
18	ST/TUNE	I	N	Anarog Input	STEREO/TUNED Detection Input
19	KEY	I	N	Anarog Input	KEY Input
20	HP DET	I	N	Port	Head Phone Detection
21	OP PROTECT	I	N	Port	Option (MD, DECK) Protect Detection Input
22	XEMR	I	N	Port	Signal of emergency generation from amplifier
23	3.3DET	I	N	Port	DVD 3.3Volt Detection Input
24	XRDY	O	N	Port	DVD Microcomputer Communication Ready output
25	DSTN	I	N	Anarog Input	Destination Switch
26	ACPULSE	I	N	INT0 Port	AC Pulse Input
27	LT1	I	C	INT1 Port	DVD Microcomputer Communication Latch input
28	RDSCLK	I	C	INT2 Port	Clock Input from RDS Decoder (Without RDS : Low Output)
29	RMC	I	C	INT3 Port	Remote Control Signal Input
30	(NC)	O	P	VFD Controller	Prohibition of use only for VFD
31	(NC)	O	P	VFD Controller	Prohibition of use only for VFD
32	(NC)	O	P	VFD Controller	Prohibition of use only for VFD
33	(NC)	O	P	VFD Controller	Prohibition of use only for VFD
34	(NC)	O	P	VFD Controller	Prohibition of use only for VFD
35	(NC)	O	P	VFD Controller	Prohibition of use only for VFD
36	(NC)	O	P	VFD Controller	Prohibition of use only for VFD
37	(NC)	O	P	VFD Controller	Prohibition of use only for VFD
38	(NC)	O	P	VFD Controller	Prohibition of use only for VFD
39	(NC)	O	P	Port	Not used
40	(NC)	O	P	Port	Not used
41	(NC)	O	P	Port	Not used
42	(NC)	O	P	Port	Not used
43	(NC)	O	P	Port	Not used
44	(NC)	O	P	Port	Not used
45	(NC)	O	P	Port	Not used
46	VDD	-	-	VDD	VDD
47	(NC)	O	P	Port	Not used
48	(NC)	O	P	Port	Not used
49	(NC)	O	P	Port	Not used
50	(NC)	O	P	Port	Not used

No.	Pin Name	I/O	MOS	Function	Pin Function
51	GND	-	-		
52	DIR DI	I	P	Port	Data Input from DIR
53	XDIR RST	O	P	Port	DIR Reset
54	DVD ON/OFF	O	P	Port	DVD Power Contorol
55	XDSP RST	O	P	Port	YSS912 Reset
56	XTMRLED	O	P	Port	Timer Standby Display LED Control
57	WCLK	I	P	Port	For Flash Rewrite
58	FAN DET	I	P	Port	FUN Detection L : OK H : NG (Power off)
59	XCDC RST	O	P	Port	CODEC Reset
60	OP PWR	O	P	Port	Option (MD, DECK) Power ON/OFF
61	XSTBYLED	O	P	Port	Standby Display LED Control
62	FLDIMA	O	P	Port	FL Dimmer Control A
63	FLDIMB	O	P	Port	FL Dimmer Control B
64	CDRD	I	P	Port	Communication for CDR : Send information from CDR to DVD
65	TXDO	I	P	Port	Data Input from FM/AM Tuner module
66	RDSDATA	I	P	Port	Data Input from RDS Decoder
67	TEST	I	P	Port	Test Mode Detection Jumper
68	UTEST	I	P	Port	Unit Test Mode Detection Jumper
69	SERVICE	I	P	Port	Service Mode Detection Jumper
70	POWER	O	P	Port	System Power Supply Control
71	DIR ERR	I	P	Port	ERR Input from DIR
72	VDD	-	-	VDD	VDD
73	SBDI	O	P	Port	System Bus Received Data
74	MASD	O	P	Port	Communication for CDR : Send information from DVD to CDR
75	XDSP MUTE	O	P	Port	DSP Mute (ASSY Mute)
76	ASSELA	O	P	Port	Audio source select A
77	ASSELB	O	P	Port	Audio source select B
78	XLINE MUTE	O	P	Port	System Audio Mute
79	MAIN VOL CS	O	P	Port	Main Volume Chip Select
80	HP VOL CE	O	P	Port	Head Phone Volume CE
81	XCDC CS	O	P	Port	Codec Chip Select
82	DIR CE	O	P	Port	DIR CE
83	HP VOL DATA	O	P	Port	Head Phone Volume Data
84	HP VOL CK	O	P	Port	Head Phone Volume Clock
85	XDVD RST	O	C	Port	DVD Reset
86	EX/V DATA	O	C	Port	Expandor/Volume Data
87	EX/V CLK	O	C	Port	Expandor/Volume Clock
88	EXCE	O	C	Port	Expandor CE
89	GND	-	-	GND	GND
90	VDD	-	-	VDD	VDD
91	FL DATA	O	C	Port	FL Driver Control Data, Using combinedly with WD0 for Flash Rewrite
92	FL CK	O	C	Port	FL Driver Control Clock
93	SBDO/REQ	O	C	Port	System Bus Sending Data/Request, Using combinedly with WEN/D1 for Flash Rewrite
94	SBCLK	O	C	Port	System Bus Clock
95	DREQ	O	C	Port	Display Data Communication Request
96	DDATA	I	C	Hard Serial	Display Data Communication Received Data
97	DCLK	I	C	Hard Serial	Display Data Communication Clock
98	SSI	O	C	Hard Serial	DVD Microcomputer Communication Data output (AMP side output)
99	SSO	I	C	Hard Serial	DVD Microcomputer Communication Data input (AMP side input)
100	SSCK	O	C	Hard Serial	DVD Microcomputer Communication Clock output

■ LC75366M (SIDEL ASSY : IC8901)

- Electronic volume for 2 channel

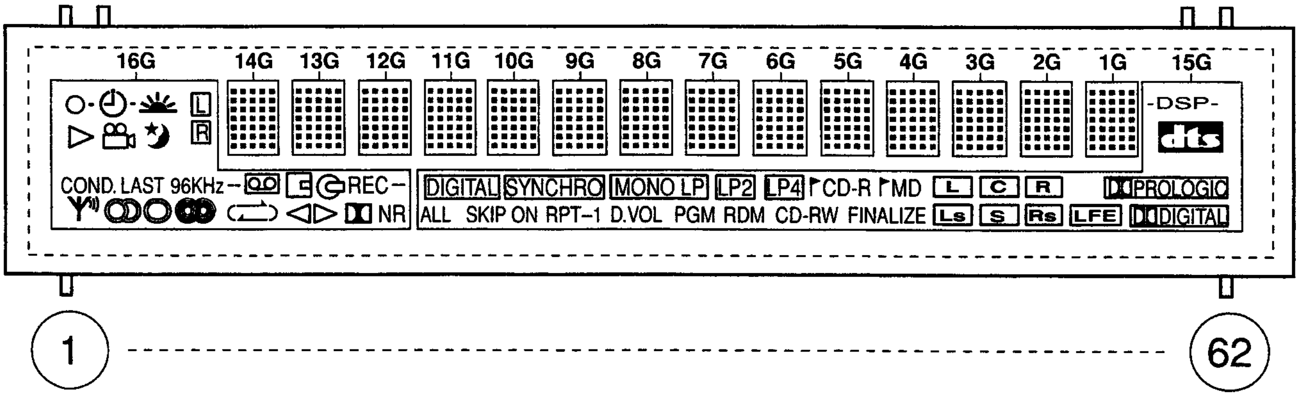
- **Block Diagram**


L10dBOUT
L2dBIN
L2dBOUT
R2dBOUT
R2dBIN
R10dBOUT
4
5
6
15
16
17
L10dBIN 1
LCT1 2
LCT2 3
LVref 7
NO
NC
20 R10dBIN
19 RCT1
18 RCT2
14 RVref
NO
NC
S 12
CE 11
CL 9
DI 10
CONTROL
LEVEL SHIFT
øL
LATCH
D
C
SHIFT REGISTER
8 VDD
13 VSS

7.2.2 DISPLAY

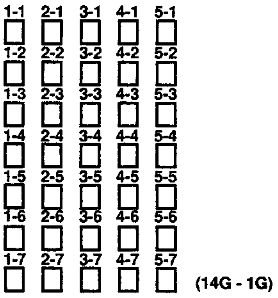
■ AAV7082 (FLDP ASSY : V5661)

- FL DISPLAY


16G
14G
13G
12G
11G
10G
9G
8G
7G
6G
5G
4G
3G
2G
1G
15G
-DSP-
dts
COND. LAST 96KHz
REC
NR
DIGITAL SYNCHRO MONO LP LP2 LP4 CD-R MD L C R PROLOGIC
ALL SKIP ON RPT-1 D.VOL PGM RDM CD-RW FINALIZE Ls S Rs LFE DIGITAL
1
62

● Anode Connection

	16G	15G	14G - 1G
P1	L R	-DSP-	1-1
P2	☀	dts	2-1
P3	-◷-	DDPROLOGIC	3-1
P4	○	DDDIGITAL	4-1
P5	🎥	LFE	5-1
P6	*☽	Rs	1-2
P7	Y»	S	2-2
P8	COND.	Ls	3-2
P9	ꝏ	R	4-2
P10	O	C	5-2
P11	LAST	L	1-3
P12	●●	FINALIZE	2-3
P13	(	⚑MD	3-3
P14	⇆	⚑CD-R	4-3
P15	)	W	5-3
P16	96KHz	–R	1-4
P17	◀	CD	2-4
P18	▶	RDM	3-4
P19	DDNR	PGM	4-4
P20	– REC–	LP4	5-4
P21	📼	LP2	1-5
P22	▣	D.VOL	2-5
P23	↻	MONO LP	3-5
P24	▷	–1	4-5
P25	–	RPT	5-5
P26	–	SYNCHRO	1-6
P27	–	ON	2-6
P28	–	SKIP	3-6
P29	–	DIGITAL	4-6
P30	–	ALL	5-6
P31	–	–	1-7
P32	–	–	2-7
P33	–	–	3-7
P34	–	–	4-7
P35	–	–	5-7


1-1
2-1
3-1
4-1
5-1
1-2
2-2
3-2
4-2
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1-3
2-3
3-3
4-3
5-3
1-4
2-4
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1-5
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3-5
4-5
5-5
1-6
2-6
3-6
4-6
5-6
1-7
2-7
3-7
4-7
5-7
(14G - 1G)

● Pin Connection

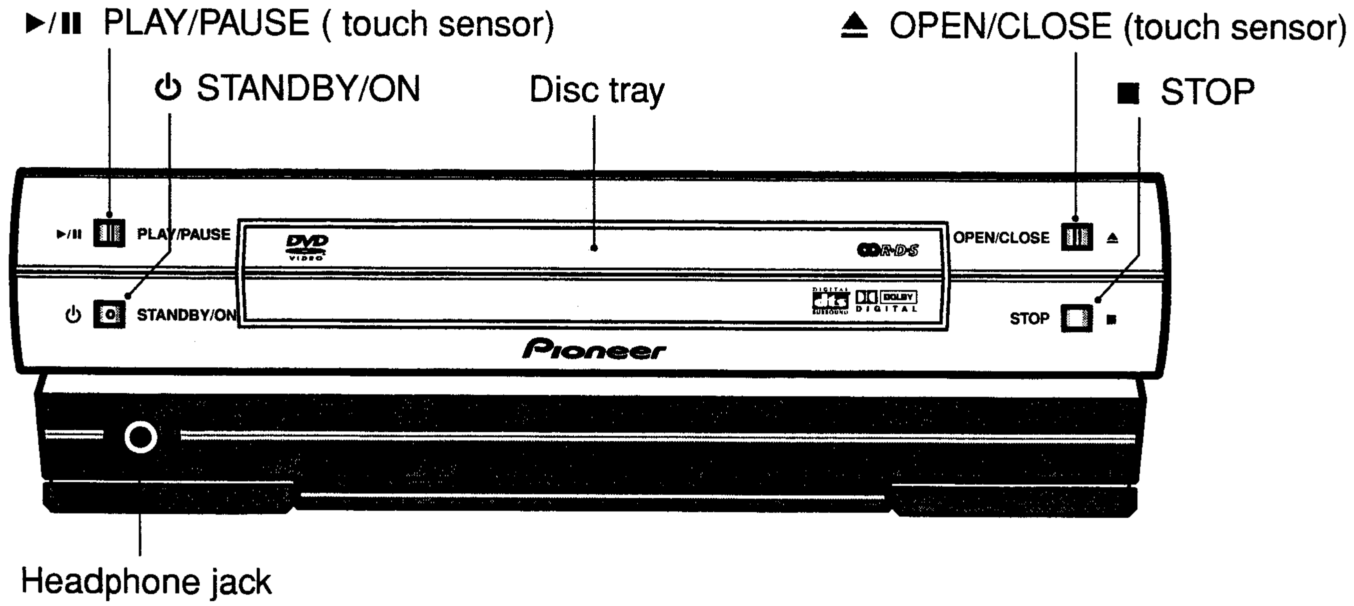
Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Connection	F1	F1	NP	NP	NX	NX	NX	P4	P3	P2	P1	16G	15G	14G	13G	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G	P35	P34	P33	P32
Pin No.	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62
Connection	P31	P30	P29	P28	P27	P26	P25	P24	P23	P22	P21	P20	P19	P18	P17	916	P15	P14	913	P12	P11	P10	P9	P8	P7	P6	P5	NP	NP	F2	F2

F1, F2 : Filament 1G~16G : Grid NP : No Pin NX : No extend pin DL : Datum Line

8. PANEL FACILITIES AND SPECIFICATIONS

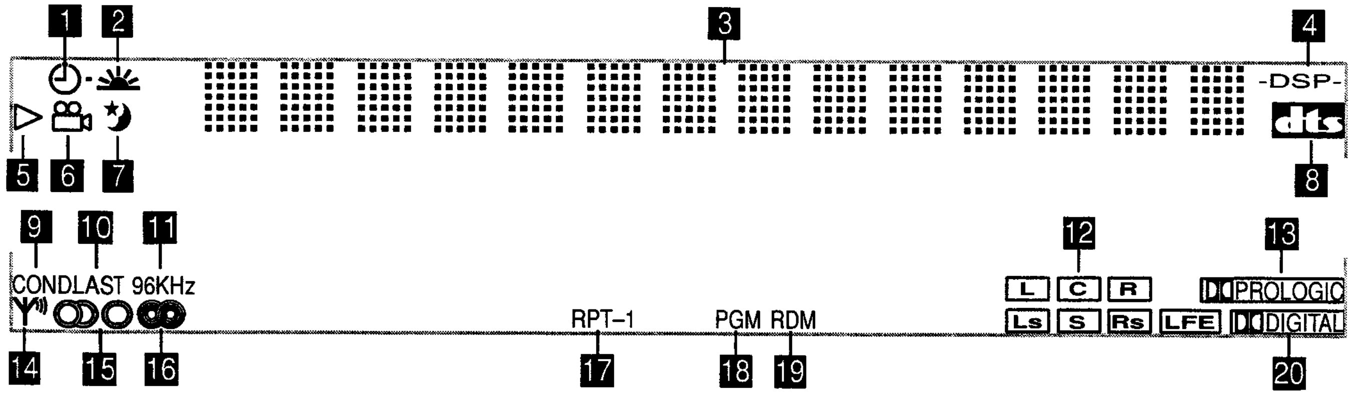
8.1 PANEL FACILITIES

■ Front panel


►/II PLAY/PAUSE (touch sensor)
⏻ STANDBY/ON
Disc tray
▲ OPEN/CLOSE (touch sensor)
■ STOP
►/II
PLAY/PAUSE
DVD VIDEO
RDS
OPEN/CLOSE ▲
⏻
STANDBY/ON
dts DIGITAL SURROUND
DOLBY DIGITAL
STOP ■
Pioneer
Headphone jack

(Illustration shows European model)

■ Display


1
2
3
4
-DSP-
dts
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6
7
8
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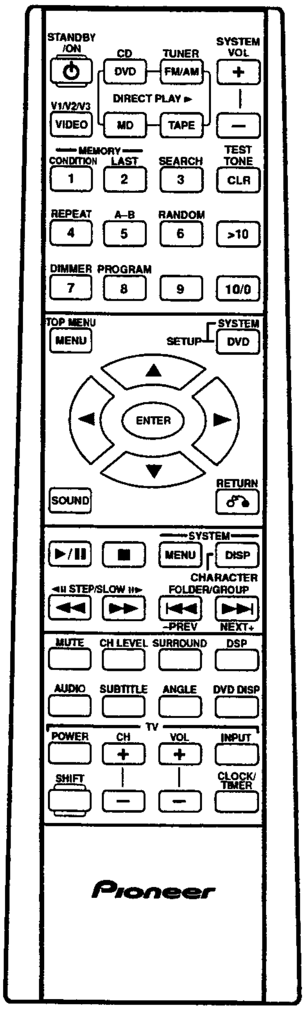
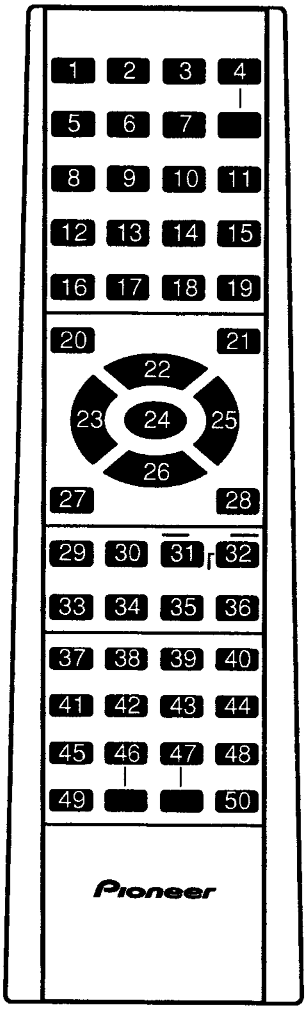
10
11
CONDLAST 96KHz
12
13
L
C
R
DD PROLOGIC
Ls
S
Rs
LFE
DD DIGITAL
RPT−1
PGM RDM
14
15
16
17
18
19
20

1 ◷ Timer
2 ☀ Wake up timer
3 Character display
4 - DSP -
5 ▷ Lights when a disc is playing
6 🎥 Multi-angle scene
7 ☾ Sleep timer
8 dts Lights when playing a DVD with DTS sound
9 COND. Condition memory
10 LAST Last memory
11 96kHz Lights when playing a disc with 96kHz audio
12 Active channel indicators
13 DD PRO LOGIC Lights when playing a Dolby Pro Logic source
14 Y Indicates strength of broadcast signal
15 ◯◯ Auto stereo/mono mode
16 ◯◯ RDS (Europan model only)
17 RPT, RPT-1 Repeat play mode
18 PGM Program play
19 RDM Random play
20 DD DOLBY DIGITAL Lights when playing a Dolby Digital source

■ Remote control


STANDBY /ON
CD
DVD
TUNER
FM/AM
SYSTEM VOL
+
V1/V2/V3
VIDEO
DIRECT PLAY ►
MD
TAPE
–
MEMORY
CONDITION
LAST
SEARCH
TEST TONE
1
2
3
CLR
REPEAT
A–B
RANDOM
4
5
6
>10
DIMMER
PROGRAM
7
8
9
10/0
TOP MENU
MENU
SETUP
SYSTEM
DVD
ENTER
SOUND
RETURN
SYSTEM
►/II
■
MENU
DISP
CHARACTER
◄II STEP/SLOW II►
FOLDER/GROUP
–PREV
NEXT+
MUTE
CH LEVEL
SURROUND
DSP
AUDIO
SUBTITLE
ANGLE
DVD DISP
TV
POWER
CH
VOL
INPUT
+
+
SHIFT
CLOCK/ TIMER
–
–
Pioneer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45
46
47
48
49
50
Pioneer

1 STANDBY/ON ⏻
2 DVD/CD (DIRECT PLAY ►)
3 TUNER FM/AM (DIRECT PLAY ►)
4 SYSTEM VOL +/–
5 VIDEO V1/V2/V3
6 MD (DIRECT PLAY ►)
7 TAPE (DIRECT PLAY ►)
8 1 | CONDITION
9 2 | LAST
10 3 | SEARCH
11 CLR | TEST TONE
12 4 | REPEAT
13 5 | A–B
14 6 | RANDOM
15 >10 Use to select numbers over 10
16 7 | DIMMER
17 8 | PROGRAM
18 9
19 10/0 Use as 10 or 0
20 MENU | TOP MENU
21 DVD SETUP | SYSTEM SETUP
22 ▲ Cursor up
23 ◄ Cursor left
24 ENTER
25 ► Cursor right
26 ▼ Cursor down
27 SOUND
28 RETURN
29 ►/II
30 ■
31 SYSTEM MENU
32 SYSTEM DISP | CHARACTER
33 ◄◄ | ◄II STEP/SLOW
34 ►► | II► STEP/SLOW
35 |◄◄ | –PREV | FOLDER/GROUP
36 ►►| | +PREV | FOLDER/GROUP
37 MUTE Press to mute/restore the sound
38 CH LEVEL
39 SURROUND
40 DSP
41 AUDIO
42 SUBTITLE
43 ANGLE
44 DVD DISP
45 POWER
46 CH+/–
47 VOL+/–
48 INPUT
49 SHIFT Press to access alternative button functions
50 CLOCK/TIMER

8.2 SPECIFICATIONS

DVD Player (Audio) Section

S/N ratio	100 dB (EIAJ)
Dynamic range	97 dB (EIAJ)
Distortion	0.004%
Frequency response	
48 kHz sampling	4 Hz to 22 kHz
96 kHz sampling	4 Hz to 44 kHz
Wow & flutter	Below measurable levels (±0.001% W.PEAK)

DVD Player (Video) Section

Output level	1 Vp-p (75 Ω)
Video Y output level	1 Vp-p (75 Ω)
Video C output level	286 mVp-p (75 Ω)

DVD (Other jacks) Section

Digital optical output (PCM/DD/DTS)	Optical connector
Digital optical input (PCM/DD/DTS)	Optical connector
Digital coaxial input (PCM/DD/DTS)	Coaxial connector

Tuner Section

FM tuner	
Frequency range	87.5 MHz to 108.0 MHz
Antenna	75 Ω unbalanced
AM tuner	
Frequency range	
European model	522 kHz to 1,602 kHz (9 kHz step)
Not applicable to European model	530 kHz to 1,700 kHz (10 kHz step) 522 kHz to 1,602 kHz (9 kHz step)
Antenna	loop antenna (supplied)

Miscellaneous

DVD/CD Tuner	
Dimensions	220 (W) x 317 (D) x 65 (H) mm (8-11/16 (W) x 12-1/2 (D) x 2-9/16 (H) in.)
Weight	2.5 kg (5 lbs 8 oz)
Display unit	
Diemnsions	206 (W) x 50 (D) x 65 (H) mm (8-1/8 (W) x 1-15/16 (D) x 2-9/16 (H) in.)
Weight	0.2 kg (7 oz.)

Operating conditions:	
Temperature	+5°C to +35°C (+41°F to 95°F)
Humidity	5% to 85% (without condensation)

Supplied Items

Display unit	1
Remote control unit	1
AA/R6P dry cell batteries	2
AM loop antenna	1
FM antenna	1
Video cord	1
Power cord	1
Speaker cords (5m)	3
Speaker cords (10m)	2
Non-skid pads (Satellite)	19
Non-skid pads (subwoofer)	4
Control cable A	1
Control cable B	1
Display cable	1
Operating instructions (Setting up)	1
Operating instructions (Basic)	1
Warranty card	1

Note:

- Specifications and design subject to possible modification without notice, due improvements.

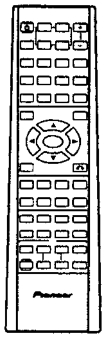
* Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories. Confidential unpublished works. © 1992-1997 Dolby Laboratories. All rights reserved.

** "DTS" and "DTS Digital Surround" are trademarks of Digital Theater Systems, Inc. Manufactured under license from Digital Theater Systems, Inc.

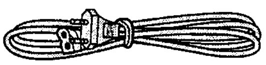
- **This product's instructions are contained within the instruction manual of the related system component(s).
The manual is packed with those component(s).
This product's accessories etc. are packed with its related component(s).**

- **ACCESSORIES**

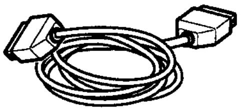
- Remote control unit
(AXD7305)



- Power cord
(ADG1154)
(For MYXJI type)

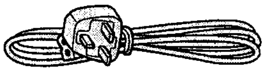


- Control cable A
(MYXJI, NVXJI : ADE7079)
(KUCXJI : ADE7078)

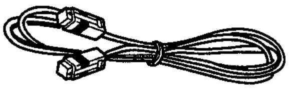


- Speaker cords (5m)
(SDS1115, SDS1116, SDS1117)

- Power cord
(ADG1156)
(For NVXJI type)

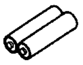


- Control cable B
(MYXJI, NVXJI : ADE7064)
(KUCXJI : ADE7063)

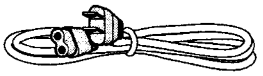


- Speaker cords (10m)
(SDS1118, SDS1119)

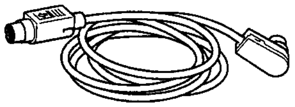
- AA/R6P
dry cell batteries
(VEM1011)



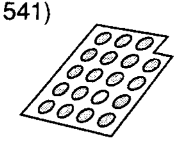
- Power cord
(ADG7022)
(For KUCXJI type)



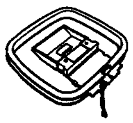
- Display cable
(ADE7077)



- Non-skid pads (Satellite)
(SEC1541)

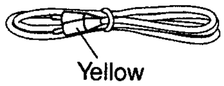


- AM loop antenna
(ATB7009)

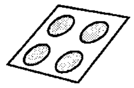


- FM antenna
(MYXJI, NVXJI : ADH7005)
(KUCXJI : ADH7004)

- Video cord
(VDE1053)
(L=1.5m)



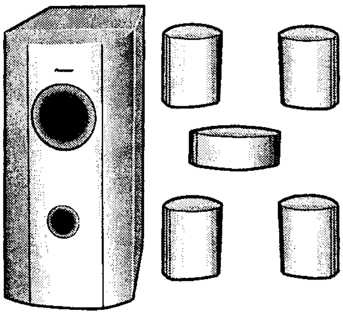
- Non-skid pads (subwoofer)
(SEC1563)



Pioneer

PION -05943

Service Manual



ORDER NO.
RRV2473

SPEAKER SYSTEM

S-DV77
S-DV77SW
S-DV77ST

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model S-DV77	Power Requirement	Remarks
MYXJI	○	AC220-230V	
NVXJI	○	AC230V	

- **This product is component of system.**

Component		System	Service Manual	Remarks
SPEAKER SYSTEM		S-DV77	————	
	POWERED SUBWOOFER	S-DV77SW	RRV2473	
	SATELLITE SPEAKER	S-DV77ST	RRV2473	

CONTENTS

1. SAFETY INFORMATION 2
2. EXPLODED VIEWS AND PARTS LIST 4
3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM ... 12
4. PCB CONNECTION DIAGRAM 22
5. PCB PARTS LIST 30
6. ADJUSTMENT 32
7. GENERAL INFORMATION 33
   7.1 DISASSEMBLY 33
8. PANEL FACILITIES AND SPECIFICATIONS 34

PIONEER CORPORATION 4-1, Meguro 1-chome, Meguro-ku, Tokyo 153-8654, Japan
PIONEER ELECTRONICS SERVICE, INC. P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.
PIONEER EUROPE NV Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 253 Alexandra Road, #04-01, Singapore 159936

©PIONEER CORPORATION 2001

T – ZZR JUNE 2001

1. SAFETY INFORMATION

This service manual is intended for qualified service technicians ; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING
This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.

Health & Safety Code Section 25249.6 – Proposition 65

NOTICE
(FOR CANADIAN MODEL ONLY)
Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE
(POUR MODÈLE CANADIEN SEULEMENT)
Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

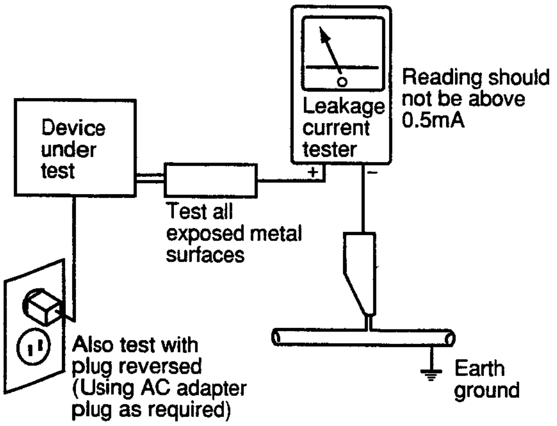
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.


Device under test
Leakage current tester
Reading should not be above 0.5mA
+
–
Test all exposed metal surfaces
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

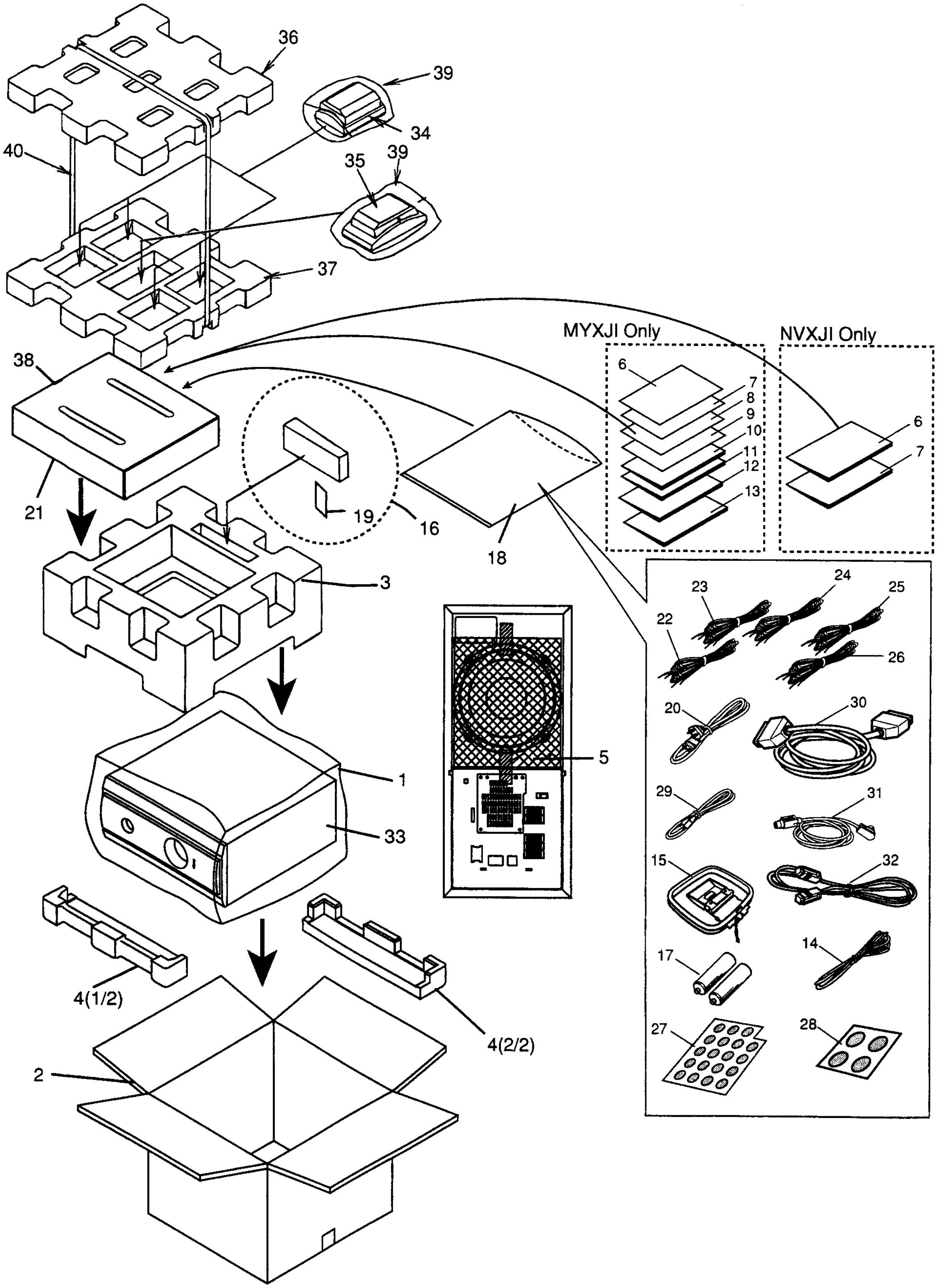
Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

2. EXPLODED VIEWS AND PARTS LIST

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Screws adjacent to ▼ mark on the product are used for disassembly.*

2.1 PACKING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37
MYXJI Only
NVXJI Only
38
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4(1/2)
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4(2/2)
2

(1) PACKING PARTS LIST

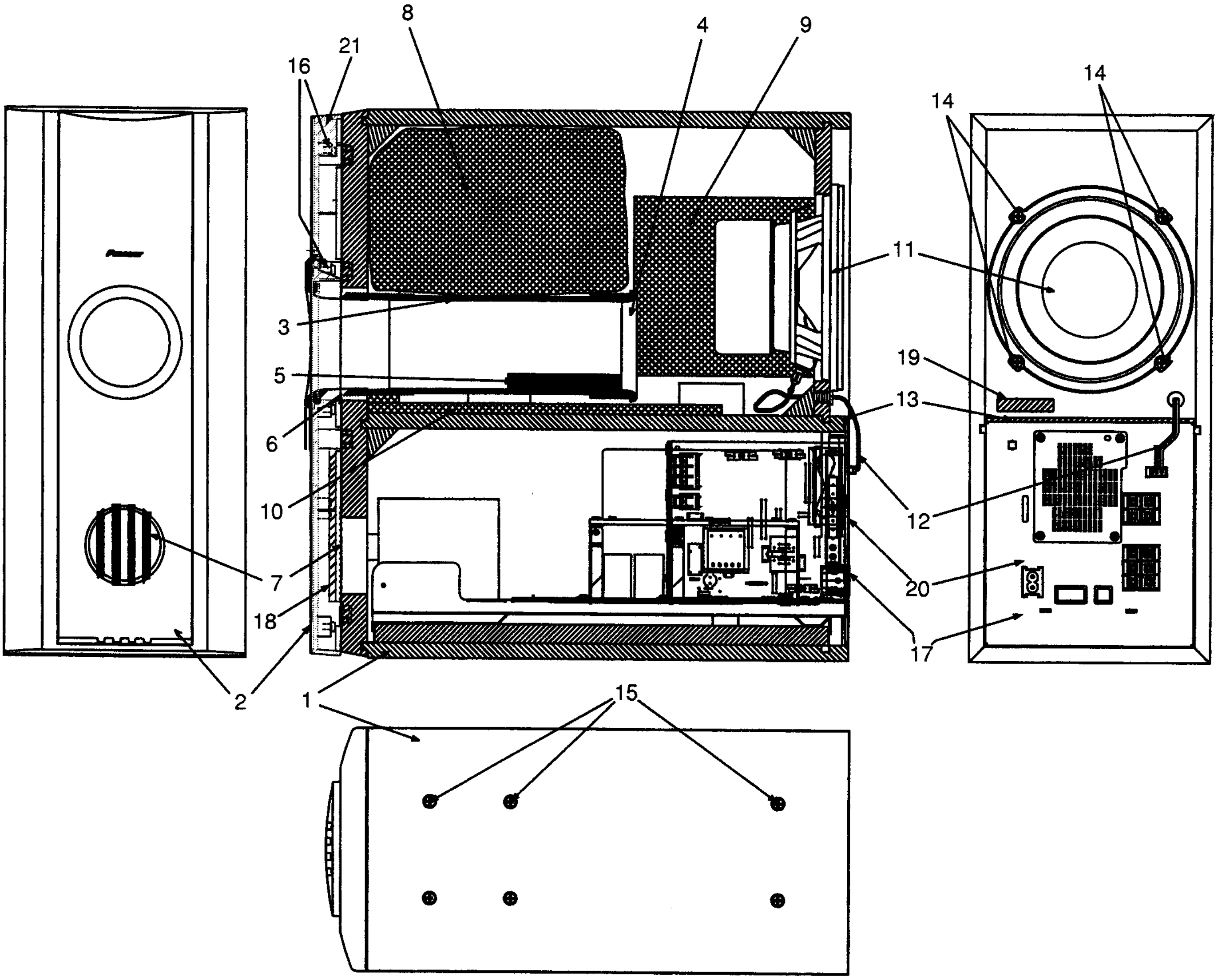
Mark	No.	Description	Part No.
	1	Poly Bag S6	SHL1292
	2	Packig Case	See Contrast table (2)
	3	Protector (Top)	SHA2313
	4	Protector (Bottom)	SHA2314
	5	Protector	SHB1097
	6	Operating Instructions (English/French)	ARE7276
	7	Operating Instructions (Setting up : English/French)	ARE7280
	8	Operating Instructions (Dutch/Spanish)	See Contrast table (2)
	9	Operating Instructions (Setting up : Dutch/Spanish)	See Contrast table (2)
	10	Operating Instructions (German/Italian)	See Contrast table (2)
	11	Operating Instructions (Setting up : German/Italian)	See Contrast table (2)
	12	Operating Instructions (Portuguese/Swedish)	See Contrast table (2)
	13	Operating Instructions (Setting up : Portuguese/Swedish)	See Contrast table (2)
	14	FM Antenna	ADH7005
	15	AM Loop Antenna	ATB7009
	16	Remote Control	AXD7305
NSP	17	Dry Cell Batteries (R6P/AA)	VEM1011
	18	Polyethylene Bag S3	SHL1293
	19	Battery Cover	103RRC14701R
⚠	20	AC Power Cord	See Contrast table (2)
NSP	21	Accessary Set	See Contrast table (2)
	22	Speaker Cord(5m:Red)	SDS1115
	23	Speaker Cord(5m:White)	SDS1116
	24	Speaker Cord(5m:Green)	SDS1117
	25	Speaker Cord(10m:Blue)	SDS1118
	26	Speaker Cord(10m:Gray)	SDS1119
	27	Non-Skid Pads	SEC1541
	28	Non-Skid Pads	SEC1563
	29	Cord With Plug	SDF1092
	30	20P Cable	ADE7079
	31	10P Cable	ADE7077
	32	12P Cable	ADE7064
NSP	33	Powered Subwoofer	See Contrast table (2)
NSP	34	Satellite Speakers (Front / Rear)	S-DV77ST/XJI/EW
NSP	35	Satellite Speaker (Center)	S-DV77ST/XJI/EW
	36	Protector (Top)	SHA2315
	37	Protector (Bottom)	SHA2316
	38	Accesary Box	SHG2342
	39	Polyethylene Bag S2	SHL1223
NSP	40	PP Band (15.5mm)	ZPX-PPBAND-15R5

(2) CONTRAST TABLE

S-DV77/MYXJI and S-DV77/NVXJI are constructed the same except for the following:

Mark	No.	Symbol and Description	Part No.		Remarks
			S-DV77 /MYXJI	S-DV77 /NVXJI	
	2	Packing Case	SHG2340	SHG2373	
	8	Operating Instructions (Dutch/Spanish)	ARC7335	Not used	
	9	Operating Instructions (Setting up : Dutch/Spanish)	ARC7340	Not used	
	10	Operating Instructions (German/Italian)	ARC7334	Not used	
	11	Operating Instructions (Setting up : German/Italian)	ARC7339	Not used	
	12	Operating Instructions (Portuguese/Swedish)	ARC7336	Not used	
	13	Operating Instructions (Setting up : Portuguese/Swedish)	ARC7341	Not used	
⚠	20	AC Power Cord	ADG1154	ADG1156	
NSP	21	Accessary Set	SME3156	SME3235	
NSP	33	Powered Subwoofer	S-DV77SW/MYXJI	S-DV77SW/NVXJI	

2.2 POWERED WOOFER SECTION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15

(1) POWERED WOOFER PARTS LIST

Mark	No.	Description	Part No.
NSP	1	Cabinet	SMM1943
NSP	2	Cosmetic Duct	SMR1336
NSP	3	Paper Tube 70	SMR1348
NSP	4	Duct Ring	SMR1339
	5	Damper	SER1300
	6	Packing	SEC1539
NSP	7	Mesh	SNC1188
NSP	8	Acoustic Absorbent (Polyester Fiber)	SMV2079
NSP	9	Acoustic Absorbent (Duffel Felt)	SMV2077
NSP	10	Acoustic Absorbent (Duffel Felt)	SMV2078
	11	Speaker	T16EU92-51C
	12	Conecting Cord	SDF1092
	13	Packing	SEC1540
	14	Screw (M4×16) (for Speaker)	BYC40P160FZB
	15	Screw (M4×18) (for Amplifier Assy fixing)	BYC40P180FZB
	16	Screw (M4×12) (for Cosmetic Duct)	BPZ40P120FZK
NSP	17	AMPLIFIER Assy	See Contrast table(2)
	18	Packing	SEC1561
	19	Serial Label	See Contrast table(2)
	20	Rear Panel	See Contrast table(2)
	21	Cosmetic Baffle	SNK2520

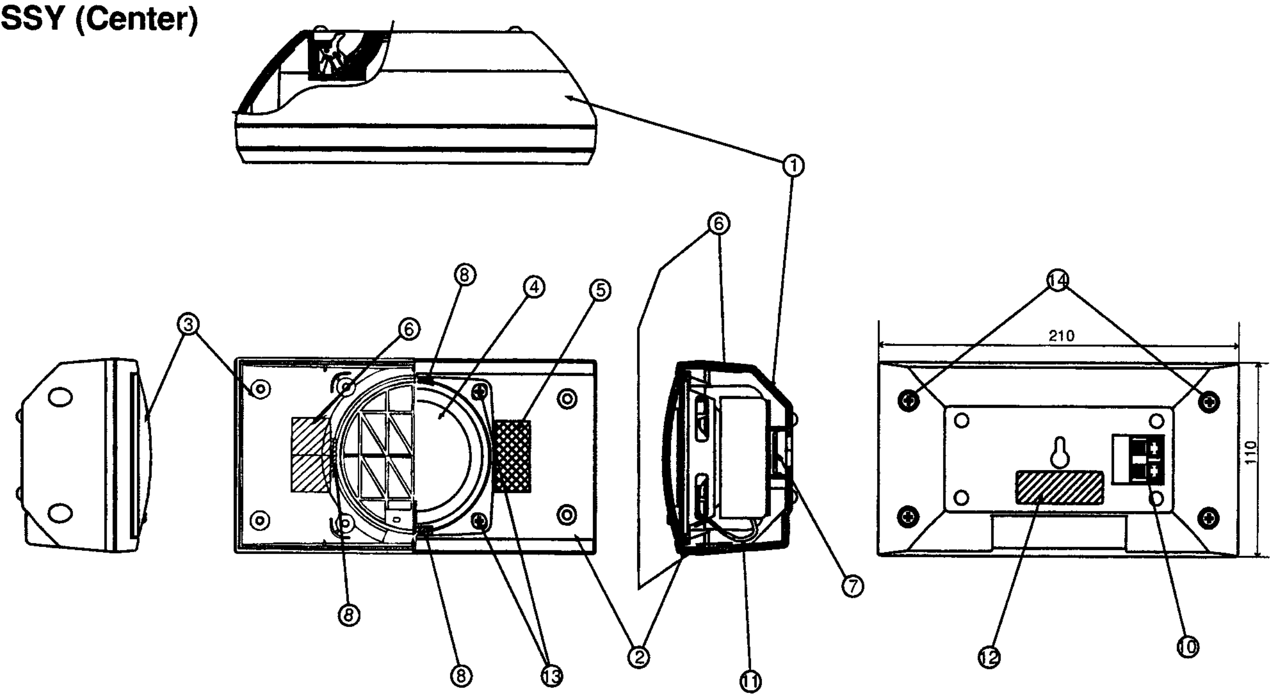
(2) CONTRAST TABLE

S-DV77SW/MYXJI and S-DV77SW/NVXJI are constructed the same except for the following:

Mark	No.	Symbol and Description	Part No.		Remarks
			S-DV77SW /MYXJI	S-DV77SW /NVXJI	
NSP	17	AMPLIFIER ASSY (DVD AMP : AWM7625)	AXX7105	AXX7101	Refer to 2.4 section.
NSP	19	Serial Label	SME3154	SME3198	
	20	Rear Panel	ANC8027	ANC8005	

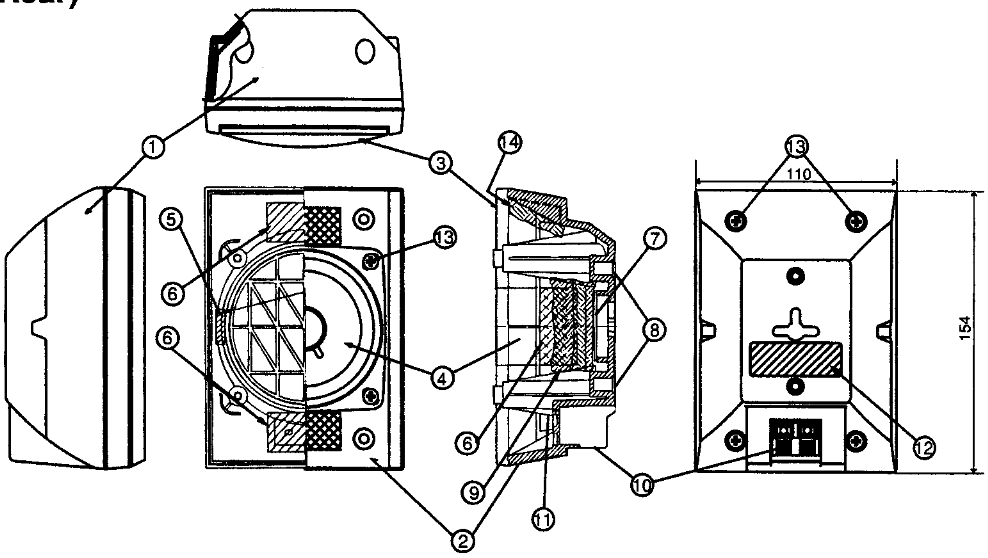
2.3 SATELLITE SPEAKER SECTION (S-DV77ST/XJI/EW)

• CS ASSY (Center)



No.	Part name	Num	Remarks	No.	Part name	Num	Remarks
1	Cabinet	1		8	Packing	2	
2	• • •			9	Acoustic Absorbent	2	
3	Grille	1		10	Input Terminal	1	
4	Speaker	1		11	Speaker Wire	1	
5	• • •			12	Label Back	1	
6	Damper	4		13	Screw (M4 × 8)	4	
7	Packing	1		14	Screw (M4 ×14)	4	

• CS ASSY (Front / Rear)



No.	Part name	Num	Remarks	No.	Part name	Num	Remarks
1	Cabinet	1		8	Fin-Lok (M5)	2	
2	• • •			9	Acoustic Absorbent	1	
3	Grille	1		10	Input Terminal	1	
4	Speaker	1		11	Speaker Wire	1	
5	Packing	2		12	Label Back	1	
6	Damper	4		13	Screw (M4 ×14)	4	
7	Packing	1		14	Acoustic Absorbent	1	

• SATELLITE SPEAKER PARTS LIST

Mark	No.	Description	Part No.
NSP		CS ASSY (Center)	SMW1657
NSP		CS ASSY (Front/Rear)	SMW1658

• CS ASSY (Center)

• PARTS LIST

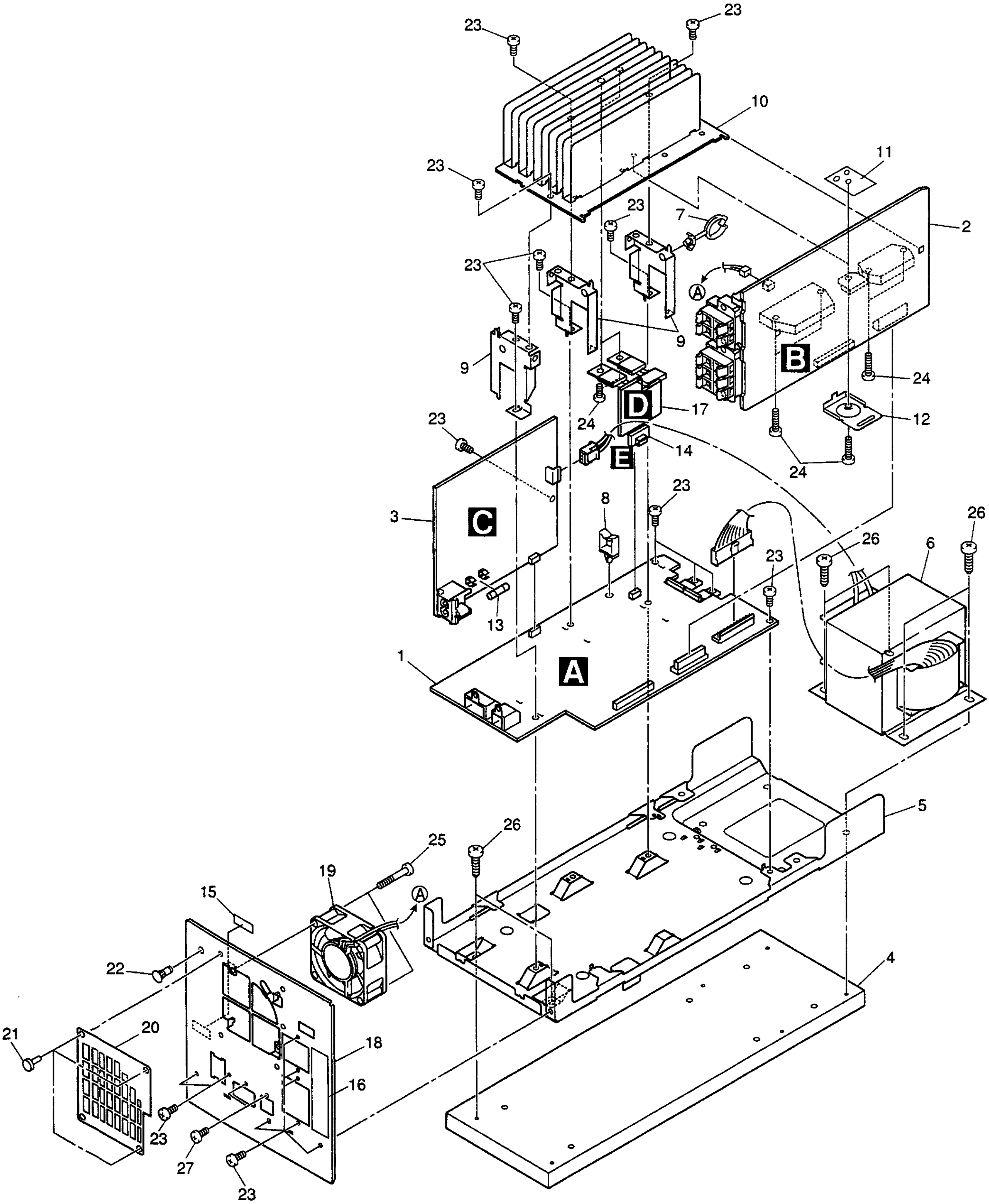
Mark	No.	Description	Part No.
		Speaker	D87DU61-53F
		Screw (for Speaker)	BPZ40P080FZK
		Screw (for Grill and Cabinet)	BPZ40P140FZK
		Speaker Wire	SDD1303
		Packing	SEC1533
		Damper	SEP1238
		Input Terminal	KKX1015
		Grill	SMG1729
NSP		├ Badge23	SAM1487
NSP		├ Grill Cloth	SAS1499
NSP		└ Grill Frame	SMH1033
NSP		Acoustic Absorbent	SMV2090
NSP		Cabinet	SNK2540
		Packing	SNK2541

• CS ASSY (Front/Rear)

• PARTS LIST

Mark	No.	Description	Part No.
		Speaker	D87DU61-53F
		Screw (for Speaker, Grill and Cabinet)	BPZ40P140FZK
		Fin-Lok M5 (for stand)	SBN1049
		Speaker Wire	SDD1303
		Packing	SEC1533
		Damper	SEP1238
		Input Terminal	KKX1015
		Grill	SMG1728
NSP		├ Badge23	SAM1487
NSP		├ Grill Cloth	SAS1498
NSP		└ Grill Frame	SMH1032
NSP		Acoustic Absorbent	SMV1940
NSP		Acoustic Absorbent	SMV2090
NSP		Cabinet	SNK2539
		Packing	SNK2541

2.4 AMPLIFIER ASSY


23
23
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9
B
24
D
17
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24
23
E
14
24
C
3
8
23
26
26
6
23
13
1
A
5
26
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19
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23

● AMPLIFIER ASSY PARTS LIST

Mark	No.	Description	Part No.
	1	AF ASS'Y	AWU7825
	2	AMP ASS'Y	AWU7827
	3	PRI ASS'Y	AWU7824
	4	Wood Base	AMM7006
NSP	5	Chassis	ANA7109
⚠	6	Power Transformer	ATS7307
NSP	7	Harness Lifter	AEC7296
	8	Wire Saddle	AEC7297
	9	Heat Sink Holder	ANG7317
NSP	10	Heat Sink	ANH7130
	11	Mica Seat	AEE7034
	12	IC Holder	ANG7318
⚠	13	Fuse (T3.15A)	REK1027
	14	TRADE ASS'Y	AWU7828
NSP	15	Seriall Label	RRW-168
NSP	16	SP Label	AAX7872
	17	REG ASS'Y	AWU7826
	18	Rear Panel	See Contrast table(2)
	19	DC Fan Motor	AXM7014
	20	Fan Cover	AEC7280
	21	Nylon Rivet	AEC7318
NSP	22	PCB Holder	AEC7057
	23	Screw	BBZ30P080FMC
	24	Screw	BBZ30P140FMC
	25	Screw	BBZ30P300FZK
	26	Screw	BYC40P140FMC
	27	Screw	PSC30P080FNI

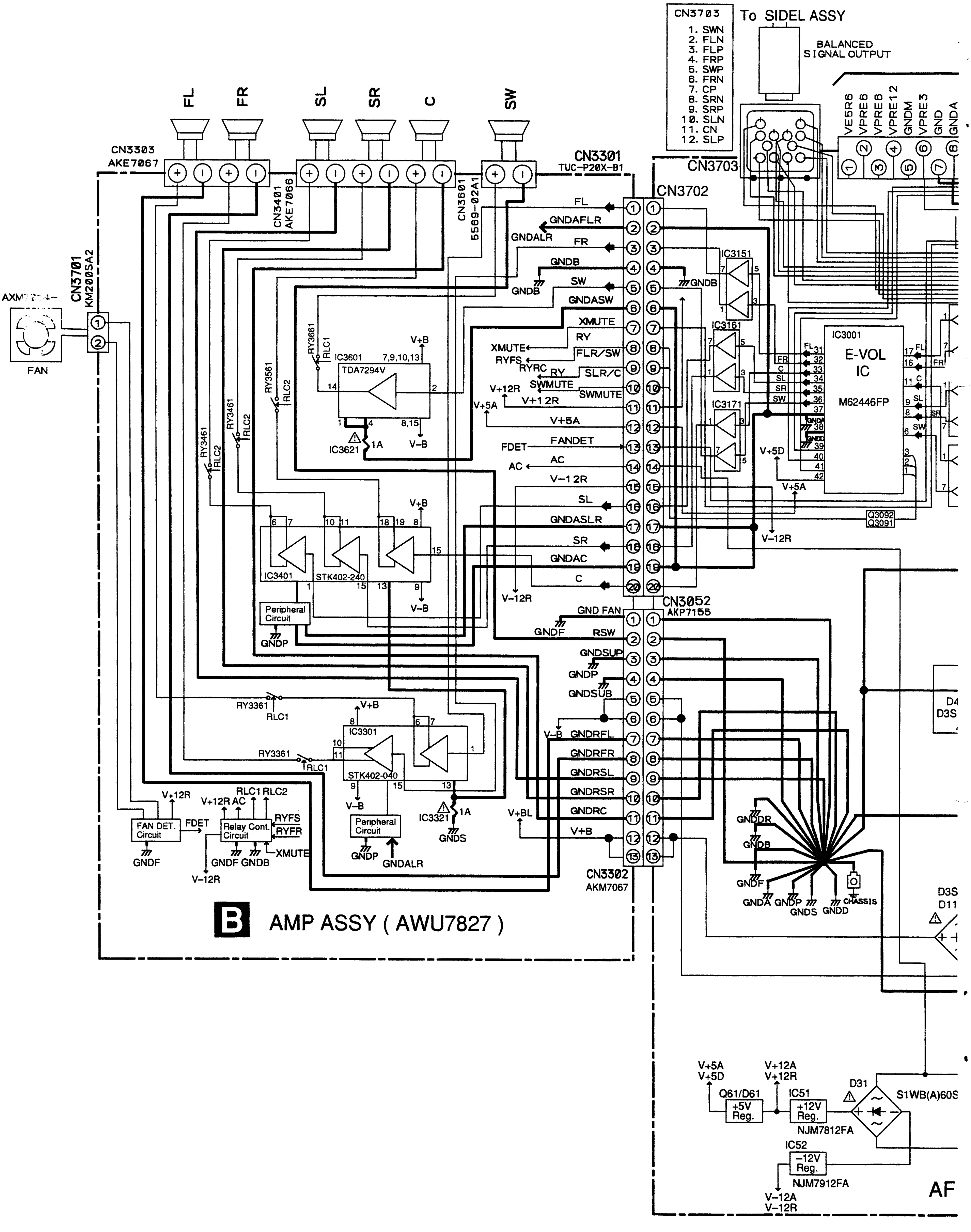
(2) CONTRAST TABLE

S-DV77SW/MYXJI and S-DV77SW/NVXJI are constructed the same except for the following:

Mark	No.	Symbol and Description	Part No.		Remarks
			S-DV77SW /MYXJI	S-DV77SW /NVXJI	
	18	Rear Panel	ANC8027	ANC8005	

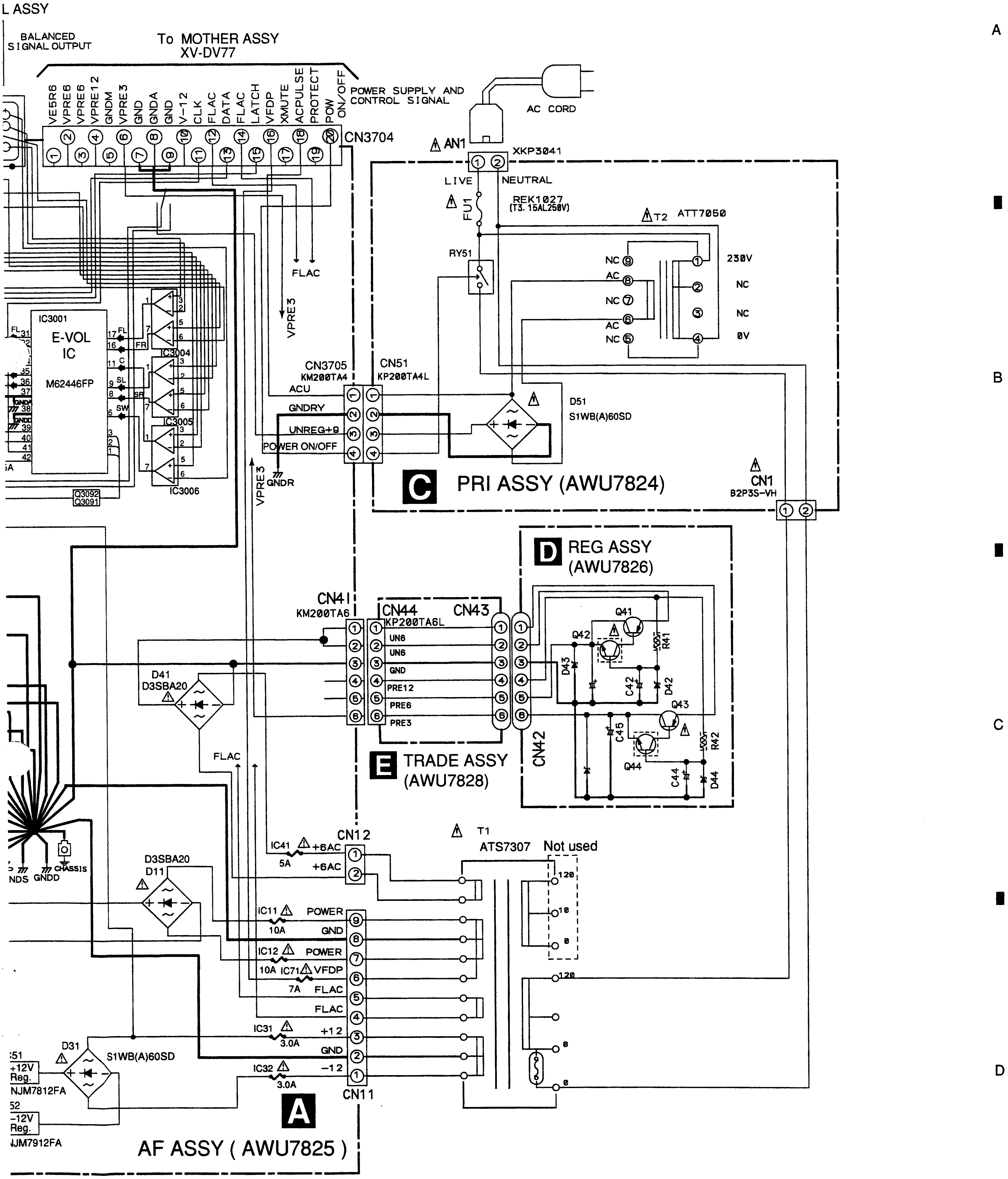
3. BLOCKDIAGRAM AND SCHEMATIC DIAGRAM

3.1 BLOCK DIAGRAM AND OVERALL CONNECTION DIAGRAM

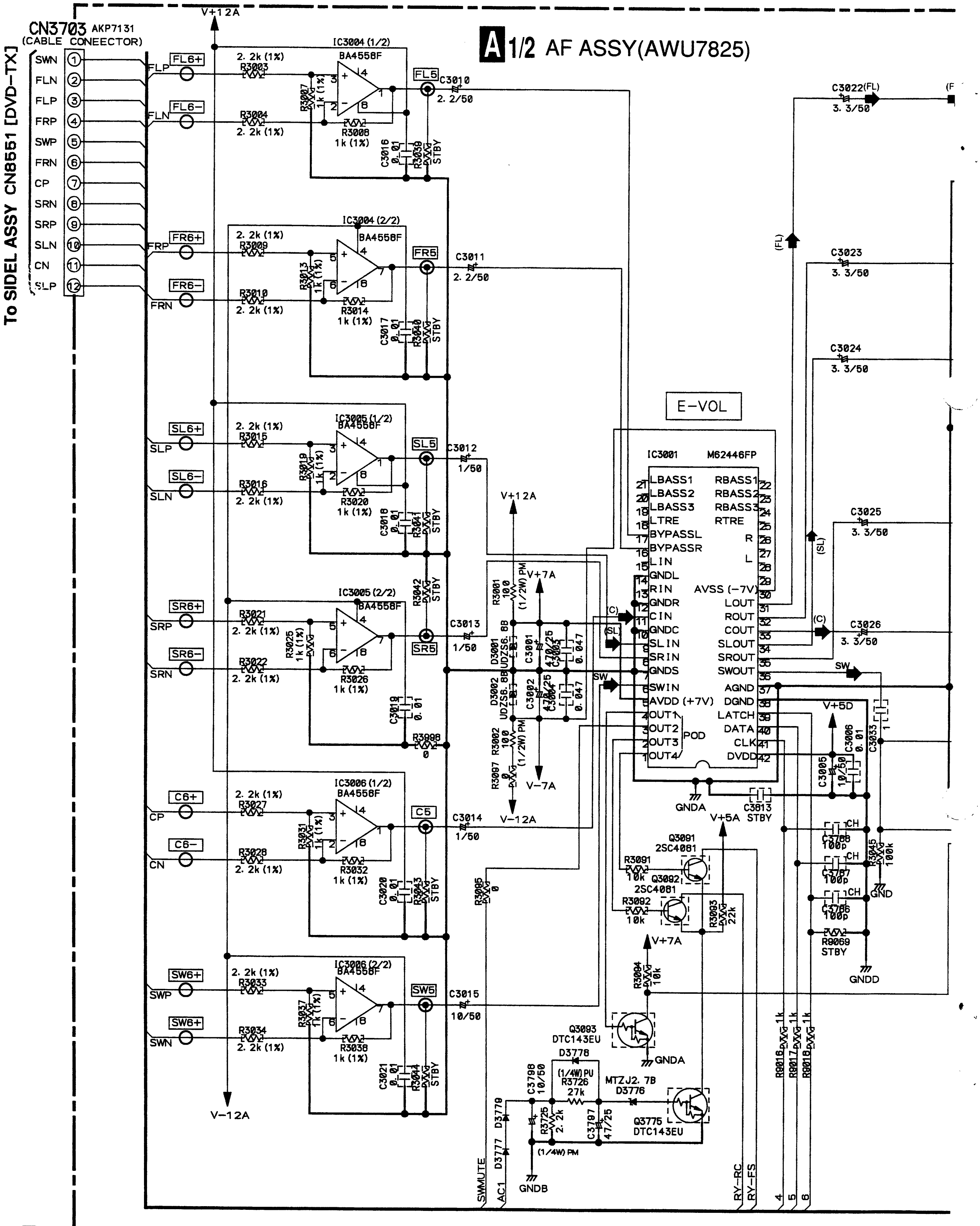

CN3703
1. SWN
2. FLN
3. FLP
4. FRP
5. SWP
6. FRN
7. CP
8. SRN
9. SRP
10. SLN
11. CN
12. SLP
To SIDEL ASSY
BALANCED SIGNAL OUTPUT
VE5R6
VPRE6
VPRE6
VPRE12
GNDM
VPRE3
GND
GNDA
FL
FR
SL
SR
C
SW
CN3303
AKE7067
CN3401
AKE7066
CN3601
5569-02A1
CN3301
TUC-P20X-B1
CN3703
CN3702
CN3701
KM200SA2
FAN
FL
GNDAFLR
GNDALR
FR
GNDB
GNDB
SW
GNDB
GNDASW
XMUTE
RY
XMUTE
FLR/SW
RYFS
RYRC
RY
SLR/C
V+12R
SWMUTE
SWMUTE
V+5A
V+12R
V+5A
FDET
FANDET
AC
AC
V-12R
SL
GNDASLR
SR
GNDAC
C
V-12R
IC3151
IC3161
IC3171
IC3001
E-VOL IC
M62446FP
V+5D
V+5A
V-12R
Q3092
Q3091
RY3661
RLC1
IC3601
TDA7294V
7,9,10,13
V+B
14
2
1
4
8,15
V-B
IC3621
1A
RY3561
RLC2
RY3461
RLC2
RY3461
RLC2
V+B
IC3401
STK402-240
Peripheral Circuit
GNDP
V-B
GND FAN
GNDF
RSW
GNDSUP
GNDP
GNDSUB
V-B
GNDRFL
GNDRFR
GNDRSL
GNDRSR
GNDRC
V+B
CN3052
AKP7155
CN3302
AKM7067
RY3361
RLC1
RY3361
RLC1
IC3301
STK402-040
V+B
V-B
IC3321
1A
GNDS
Peripheral Circuit
GNDP
GNDALR
V+BL
V+12R
V+12R AC
RLC1 RLC2
FAN DET. Circuit
FDET
Relay Cont. Circuit
RYFS
RYFR
XMUTE
GNDF
GNDF GNDB
V-12R
GNDDR
GNDB
GNDF
GNDA GNDP
GNDS GNDD
CHASSIS
D4
D3S
D3S
D11
V+5A
V+5D
Q61/D61
+5V Reg.
V+12A
V+12R
IC51
+12V Reg.
NJM7812FA
D31
S1WB(A)60S
IC52
-12V Reg.
NJM7912FA
V-12A
V-12R
AF

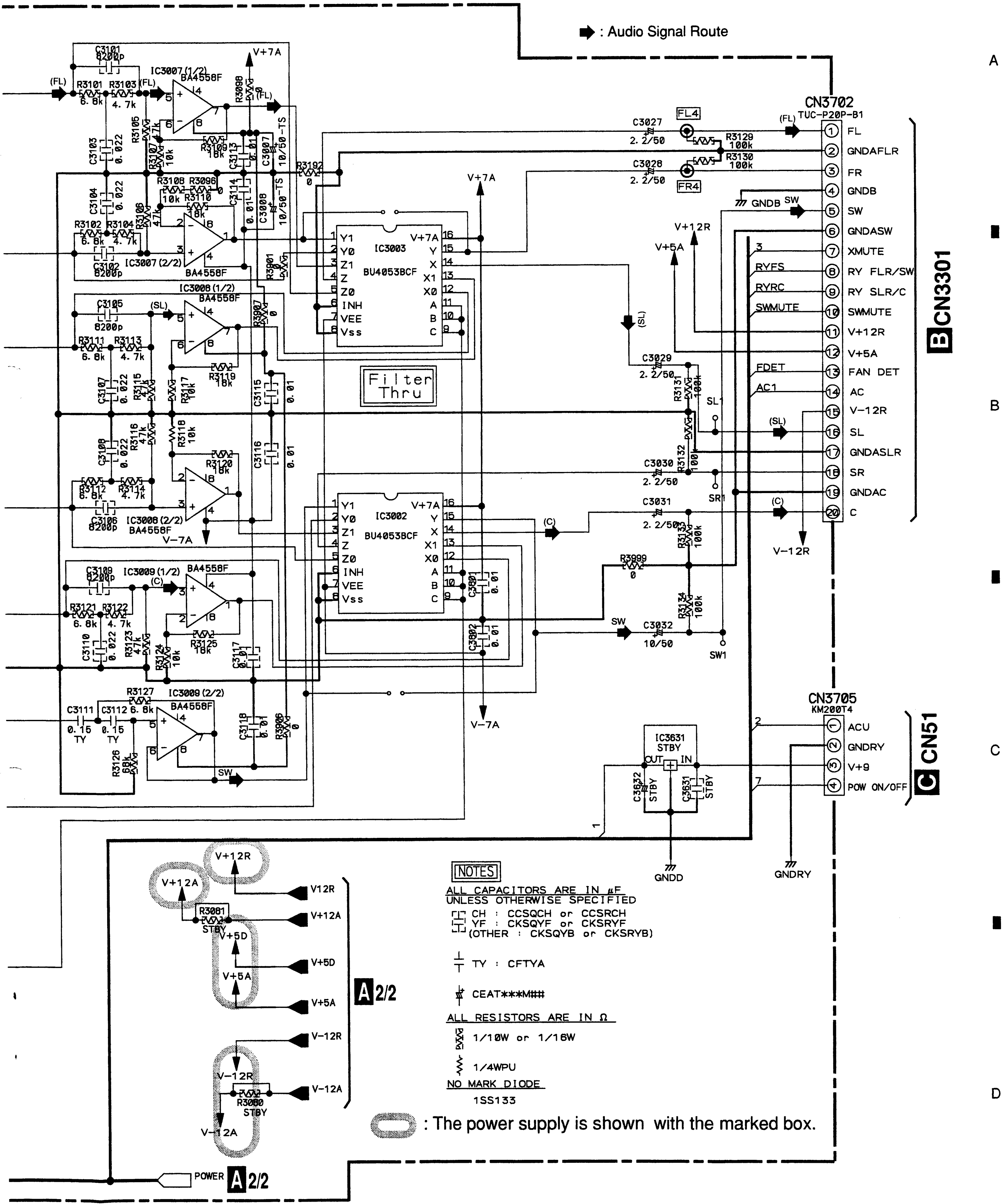
B AMP ASSY (AWU7827)

Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".


L ASSY
BALANCED SIGNAL OUTPUT
To MOTHER ASSY XV-DV77
VE5R6
VPRE6
VPRE6
VPRE12
GNDM
VPRE3
GND
GNDA
GND
V-12
CLK
FLAC
DATA
FLAC
LATCH
VFDP
XMUTE
ACPULSE
PROTECT
POW ON/OFF
POWER SUPPLY AND CONTROL SIGNAL
CN3704
AC CORD
AN1
XKP3041
LIVE
NEUTRAL
FU1
REK1027 (T3.15AL250V)
T2 ATT7050
RY51
NC 9
AC 8
NC 7
AC 6
NC 5
230V
NC
NC
0V
FLAC
VPRE3
IC3001
E-VOL IC
M62446FP
IC3004
IC3005
IC3006
Q3092
Q3091
CN3705
KM200TA4
ACU
GNDRY
UNREG+9
POWER ON/OFF
CN51
KP200TA4L
D51
S1WB(A)60SD
VPRE3
GNDR
C
PRI ASSY (AWU7824)
CN1
B2P3S-VH
D
REG ASSY (AWU7826)
CN41
KM200TA6
CN44
KP200TA6L
CN43
UN6
UN6
GND
PRE12
PRE6
PRE3
Q41
Q42
Q43
Q44
R41
R42
D42
D43
D44
C42
C44
C45
CN42
D41
D3SBA20
FLAC
E
TRADE ASSY (AWU7828)
CN12
IC41
+6AC
+6AC
5A
T1
ATS7307
Not used
120
10
0
120
0
0
D3SBA20
D11
CHASSIS
NDS
GNDD
IC11
POWER
10A
GND
IC12
POWER
10A
IC71
VFDP
7A
FLAC
FLAC
IC31
+12
3.0A
GND
IC32
-12
3.0A
CN11
D31
S1WB(A)60SD
+12V Reg.
NJM7812FA
-12V Reg.
NJM7912FA
A
AF ASSY (AWU7825)

3.2 AF ASSY (1/2)


A 1/2 AF ASSY(AWU7825)
To SIDEL ASSY CN8551 [DVD-TX]
CN3703 AKP7131
(CABLE CONEECTOR)
SWN ①
FLN ②
FLP ③
FRP ④
SWP ⑤
FRN ⑥
CP ⑦
SRN ⑧
SRP ⑨
SLN ⑩
CN ⑪
SLP ⑫
V+12A
V-12A
FL6+
FL6-
FLP
FLN
R3003 2.2k (1%)
R3004 2.2k (1%)
R3007 1k (1%)
R3008 1k (1%)
IC3004 (1/2) BA4558F
FL5
C3010 2.2/50
C3016 0.01
R3039 STBY
FR6+
FR6-
FRP
FRN
R3009 2.2k (1%)
R3010 2.2k (1%)
R3013 1k (1%)
R3014 1k (1%)
IC3004 (2/2) BA4558F
FR5
C3011 2.2/50
C3017 0.01
R3040 STBY
SL6+
SL6-
SLP
SLN
R3015 2.2k (1%)
R3016 2.2k (1%)
R3019 1k (1%)
R3020 1k (1%)
IC3005 (1/2) BA4558F
SL5
C3012 1/50
C3018 0.01
R3041 STBY
R3042 STBY
SR6+
SR6-
SRP
SRN
R3021 2.2k (1%)
R3022 2.2k (1%)
R3025 1k (1%)
R3026 1k (1%)
IC3005 (2/2) BA4558F
SR5
C3013 1/50
C3019 0.01
R3098 0
C6+
C6-
CP
CN
R3027 2.2k (1%)
R3028 2.2k (1%)
R3031 1k (1%)
R3032 1k (1%)
IC3006 (1/2) BA4558F
C5
C3014 1/50
C3020 0.01
R3043 STBY
SW6+
SW6-
SWP
SWN
R3033 2.2k (1%)
R3034 2.2k (1%)
R3037 1k (1%)
R3038 1k (1%)
IC3006 (2/2) BA4558F
SW5
C3015 10/50
C3021 0.01
R3044 STBY
V+12A
V-12A
V+7A
V-7A
R3001 100 (1/2W) PM
R3002 100 (1/2W) PM
D3001 UDZS6.8B
D3002 UDZS6.8B
C3001 470/25
C3002 470/25
C3003 0.047
C3004 0.047
R3097 0
R3095 0
E-VOL
IC3001 M62446FP
21 LBASS1
20 LBASS2
19 LBASS3
18 LTRE
17 BYPASSL
16 BYPASSR
15 LIN
14 GNDL
13 RIN
12 GNDR
11 CIN
10 GNDC
9 SLIN
8 SRIN
7 GNDS
6 SWIN
5 AVDD (+7V)
4 OUT1
3 OUT2
2 OUT3
1 OUT4
POD
RBASS1 22
RBASS2 23
RBASS3 24
RTRE 25
R 26
L 27
28
29
AVSS (-7V) 30
LOUT 31
ROUT 32
COUT 33
SLOUT 34
SROUT 35
SWOUT 36
AGND 37
DGND 38
LATCH 39
DATA 40
CLK 41
DVDD 42
(C)
(SL)
SW
GNDA
C3013 STBY
V+5A
V+5D
C3005 10/50
C3006 0.01
C3033 1
(FL)
(SL)
(C)
C3022(FL) 3.3/50
C3023 3.3/50
C3024 3.3/50
C3025 3.3/50
C3026 3.3/50
SW
CH
C3788 100p
C3787 100p
C3786 100p
R3045 100k
R9069 STBY
GND
GNDD
Q3091 2SC4081
Q3092 2SC4081
R3091 10k
R3092 10k
R3093 22k
V+7A
R3094 10k
Q3093 DTC143EU
GNDA
D3778
C3798 10/50
(1/4W) PU
R3726 27k
MTZJ2.7B D3776
R3725 2.2k
C3797 47/25
Q3775 DTC143EU
(1/4W) PM
D3777
D3779
GNDB
SWMUTE
AC1
RY-RC
RY-FS
R9016 1k
R9017 1k
R9018 1k
4
5
6


: Audio Signal Route
C3101 8200p
R3101 6.8k
R3103 4.7k
IC3007(1/2) BA4558F
V+7A
R3098 0
(FL)
R3105 47k
R3109 18k
C3103 0.022
C3104 0.022
R3107 10k
C3113 0.01
C3007 10/50-TS
C3114 0.01
C3008 10/50-TS
R3192 0
R3108 10k
R3096 0
R3110 18k
R3106 47k
R3102 6.8k
R3104 4.7k
C3102 8200p
IC3007(2/2) BA4558F
R3001 0
IC3003 BU4053BCF
Y1 Y0 Z1 Z Z0 INH VEE Vss
V+7A Y X X1 X0 A B C
IC3008(1/2) BA4558F
C3105 8200p
(SL)
R3111 6.8k
R3113 4.7k
R3007 0
R3119 18k
C3107 0.022
R3115 47k
R3117 10k
C3115 0.01
Filter Thru
C3108 0.022
R3116 47k
R3118 10k
C3116 0.01
R3120 18k
R3112 6.8k
R3114 4.7k
C3106 8200p
IC3008(2/2) BA4558F
V-7A
IC3002 BU4053BCF
(C)
C3109 8200p
IC3009(1/2) BA4558F
R3121 6.8k
R3122 4.7k
C3110 0.022
R3123 47k
R3124 10k
R3125 18k
C3117 0.01
C3801 0.01
C3802 0.01
R3127 6.8k
IC3009(2/2) BA4558F
C3111 0.15 TY
C3112 0.15 TY
R3126 68k
C3118 0.01
R3906 0
SW
V-7A
FL4
FR4
C3027 2.2/50
R3129 100k
C3028 2.2/50
R3130 100k
CN3702 TUC-P20P-B1
1 FL
2 GNDAFLR
3 FR
4 GNDB
5 SW
6 GNDASW
7 XMUTE
8 RY FLR/SW
9 RY SLR/C
10 SWMUTE
11 V+12R
12 V+5A
13 FAN DET
14 AC
15 V-12R
16 SL
17 GNDASLR
18 SR
19 GNDAC
20 C
B CN3301
GNDB
V+12R
V+5A
RYFS
RYRC
SWMUTE
FDET
AC1
C3029 2.2/50
R3131 100k
SL1
R3132 100k
C3030 2.2/50
SR1
C3031 2.2/50
R3133 100k
R3999 0
R3134 100k
C3032 10/50
SW1
V-12R
CN3705 KM200T4
1 ACU
2 GNDRY
3 V+9
4 POW ON/OFF
C CN51
IC3631 STBY
OUT IN
C3632 STBY
C3631 STBY
GNDD
GNDRY
V+12R
V+12A
R3081 STBY
V+5D
V+5A
V12R
V+12A
V+5D
V+5A
A 2/2
V-12R
V-12R
V-12A
R3080 STBY
V-12A
POWER
A 2/2
A B C D

NOTES

ALL CAPACITORS ARE IN μF
UNLESS OTHERWISE SPECIFIED
CH : CCSQCH or CCSRCH
YF : CKSQYF or CKSRYF
(OTHER : CKSQYB or CKSRYB)

TY : CFTYA

CEAT***M###

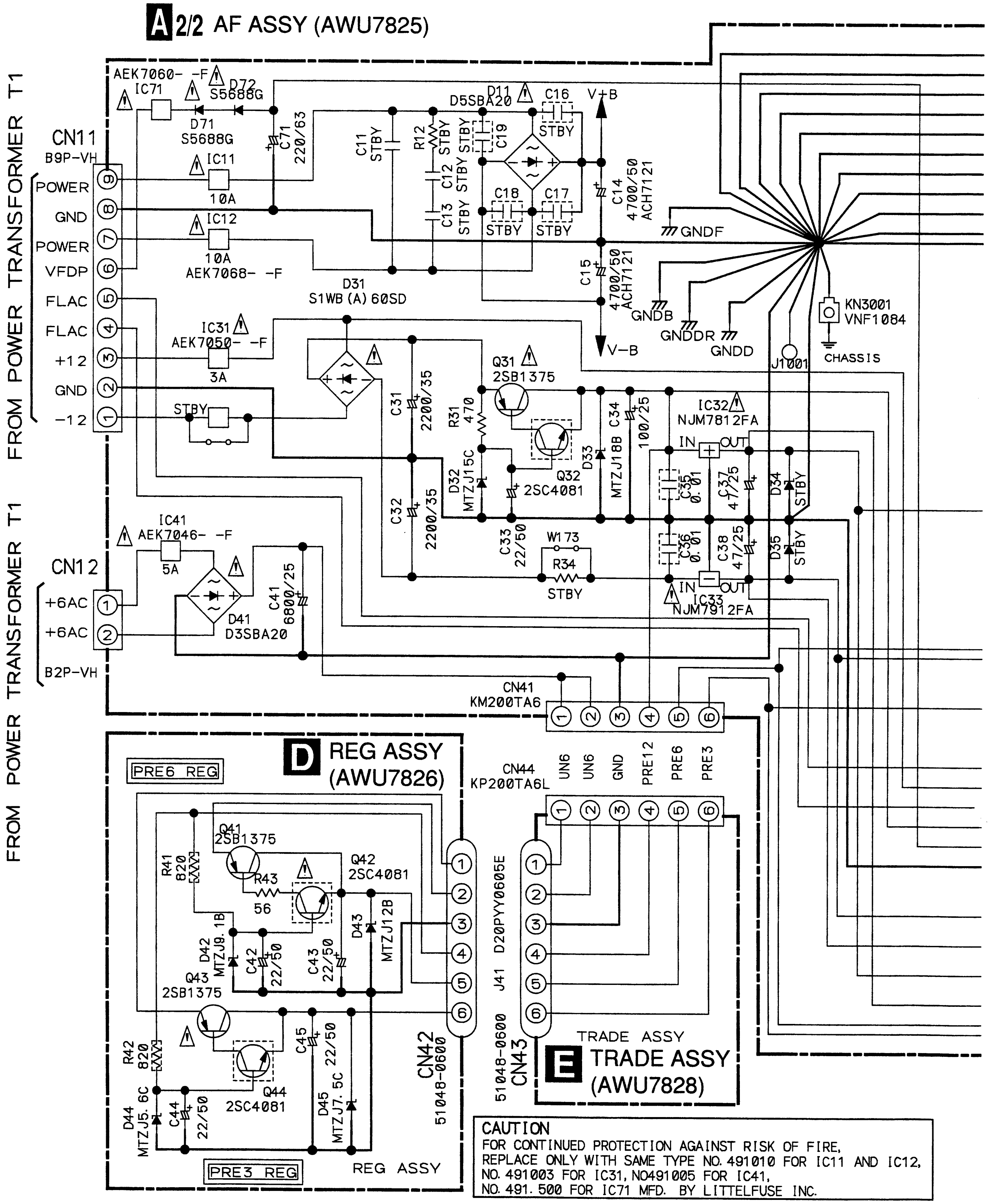
ALL RESISTORS ARE IN Ω
1/10W or 1/16W

1/4WPU

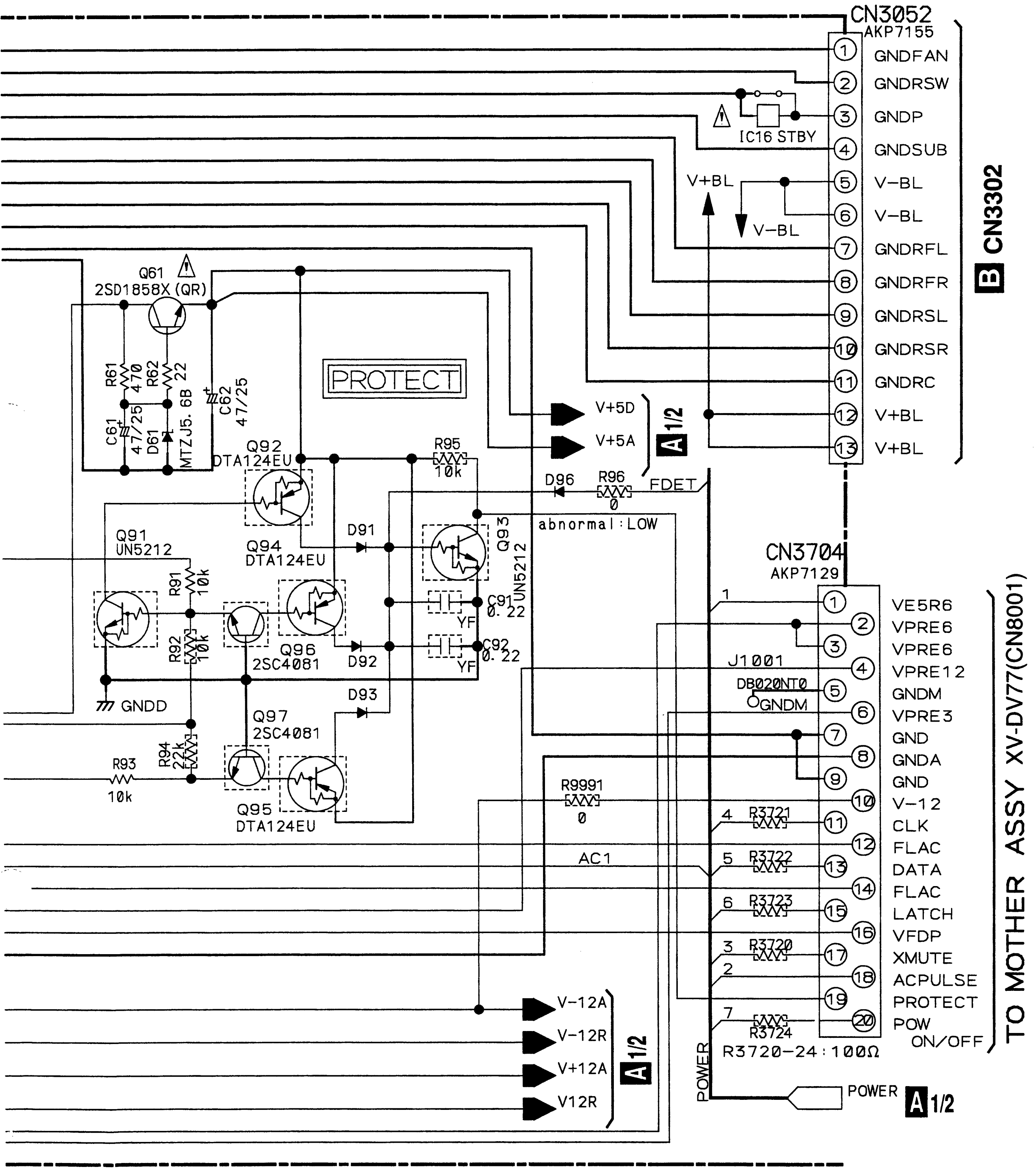
NO MARK DIODE
1SS133

: The power supply is shown with the marked box.

3.3 AF ASSY (2/2), REG ASSY and TRADE ASSY


A 2/2 AF ASSY (AWU7825)
FROM POWER TRANSFORMER T1
FROM POWER TRANSFORMER T1
CN11
B9P-VH
POWER 9
GND 8
POWER 7
VFDP 6
FLAC 5
FLAC 4
+12 3
GND 2
-12 1
AEK7060- -F
IC71
D72
S5688G
D71
S5688G
C71
220/63
IC11
10A
IC12
10A
AEK7068- -F
C11
STBY
R12
STBY
C12
STBY
C13
STBY
STBY
C19
D11
D5SBA20
C16
STBY
V+B
C18
STBY
C17
STBY
C14
4700/50
ACH7121
C15
4700/50
ACH7121
GNDF
GNDB
GNDDR
GNDD
V-B
J1001
KN3001
VNF1084
CHASSIS
D31
S1WB (A) 60SD
IC31
AEK7050- -F
3A
STBY
C31
2200/35
C32
2200/35
R31
470
Q31
2SB1375
Q32
2SC4081
D32
MTZJ15C
C33
22/50
D33
MTZJ18B
C34
100/25
W173
R34
STBY
IC32
NJM7812FA
IN
OUT
C35
0.01
C37
47/25
D34
STBY
C36
0.01
C38
47/25
D35
STBY
IC33
NJM7912FA
IN
OUT
CN12
+6AC 1
+6AC 2
B2P-VH
IC41
AEK7046- -F
5A
D41
D3SBA20
C41
6800/25
CN41
KM200TA6
1 2 3 4 5 6
D REG ASSY (AWU7826)
PRE6 REG
CN44
KP200TA6L
UN6
UN6
GND
PRE12
PRE6
PRE3
1 2 3 4 5 6
R41
820
Q41
2SB1375
R43
56
Q42
2SC4081
D42
MTZJ9.1B
C42
22/50
C43
22/50
D43
MTZJ12B
Q43
2SB1375
R42
820
Q44
2SC4081
C45
22/50
D44
MTZJ5.6C
C44
22/50
D45
MTZJ7.5C
PRE3 REG
REG ASSY
CN42
51048-0600
1 2 3 4 5 6
J41 D20PYY0605E
CN43
51048-0600
1 2 3 4 5 6
TRADE ASSY
E TRADE ASSY (AWU7828)

CAUTION
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,
REPLACE ONLY WITH SAME TYPE NO. 491010 FOR IC11 AND IC12,
NO. 491003 FOR IC31, NO491005 FOR IC41,
NO. 491.500 FOR IC71 MFD. BY LITTELFUSE INC.


CN3052
AKP7155
① GNDFAN
② GNDRSW
③ GNDP
④ GNDSUB
⑤ V-BL
⑥ V-BL
⑦ GNDRFL
⑧ GNDRFR
⑨ GNDRSL
⑩ GNDRSR
⑪ GNDRC
⑫ V+BL
⑬ V+BL
B CN3302
IC16 STBY
V+BL
V-BL
Q61
2SD1858X (QR)
R61 470
R62 22
C61 47/25
D61
MTZJ5.6B
C62 47/25
PROTECT
V+5D
V+5A
A 1/2
Q92
DTA124EU
R95 10k
D96
R96 0
FDET
abnormal : LOW
Q91
UN5212
Q94
DTA124EU
D91
Q93
UN5212
R91 10k
C91 0.22 YF
R92 10k
Q96
2SC4081
D92
C92 0.22 YF
GNDD
D93
Q97
2SC4081
R94 22k
R93 10k
Q95
DTA124EU
CN3704
AKP7129
J1001
DB020NT0
GNDM
R9991 0
AC1
R3721
R3722
R3723
R3720
R3724
1
4
5
6
3
2
7
① VE5R6
② VPRE6
③ VPRE6
④ VPRE12
⑤ GNDM
⑥ VPRE3
⑦ GND
⑧ GNDA
⑨ GND
⑩ V-12
⑪ CLK
⑫ FLAC
⑬ DATA
⑭ FLAC
⑮ LATCH
⑯ VFDP
⑰ XMUTE
⑱ ACPULSE
⑲ PROTECT
⑳ POW ON/OFF
TO MOTHER ASSY XV-DV77(CN8001)
R3720-24 : 100Ω
V-12A
V-12R
V+12A
V12R
A 1/2
POWER
POWER
A 1/2

NOTES

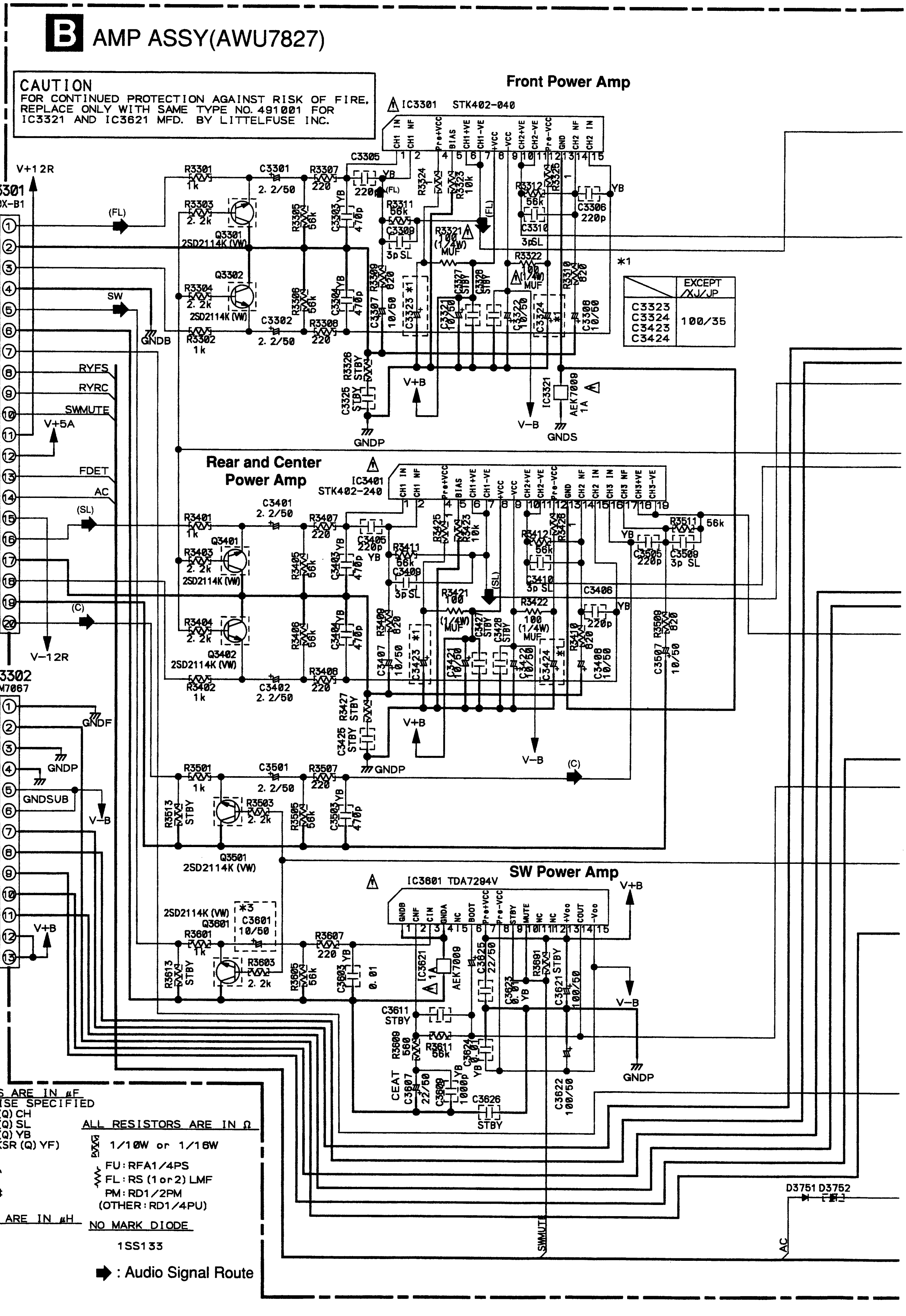
ALL CAPACITORS ARE IN μF
UNLESS OTHERWISE SPECIFIED
CH : CCSQCH or CCSRCH
YF : CKSQYF or CKSRYF
(OTHER : CKSQYB or CKSRYB)

CEAT***M##

ALL RESISTORS ARE IN Ω
1/10W or 1/16W
1/4WPU

NO MARK DIODE
1SS133

3.4 AMP ASSY


B AMP ASSY(AWU7827)
Front Power Amp
IC3301 STK402-040
Rear and Center Power Amp
IC3401 STK402-240
SW Power Amp
IC3601 TDA7294V
CN3301 TUC-P20X-B1
FLIN
GNDALR
FRIN
GNDB
SWIN
GNDASW
XMUTE
RY FLR/SW
RY SLR/C
SWMUTE
V+12R
V+5A
FANDET
AC
V-12R
SLIN
GNDAR
SRIN
GNDAC
CIN
A 1/2 CN3702
CN3302 AKM7067
GNDFAN
GNDRSW
GNDSUP
GNDSUB
V-B
V-B
GNDRFL
GNDRFR
GNDRC
GNDRSL
GNDRSR
V+B
V+B
A 2/2 CN3052
RYFS
RYRC
SWMUTE
FDET
AC
V+12R
V+5A
V-12R
(FL)
SW
(SL)
(C)
GNDB
GNDF
GNDP
GNDSUB
GNDS
V+B
V-B
Q3301 2SD2114K (VW)
Q3302 2SD2114K (VW)
Q3401 2SD2114K (VW)
Q3402 2SD2114K (VW)
Q3501 2SD2114K (VW)
Q3601 2SD2114K (VW)
IC3321 AEK7009 1A
IC3621 1A AEK7009
*1
EXCEPT /XJ/JP
C3323 C3324 C3423 C3424 100/35
*3 C3601 10/50
D3751 D3752
SWMUTE
AC

CAUTION
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE NO. 491001 FOR IC3321 AND IC3621 MFD. BY LITTELFUSE INC.

NOTES

ALL CAPACITORS ARE IN µF
UNLESS OTHERWISE SPECIFIED
CH : CCSR (Q) CH
SL : CCSR (Q) SL
YB : CKSR (Q) YB
(OTHER : CKSR (Q) YF)
TY : CFTYA
CEAT✱✱✱M###

ALL INDUCTORS ARE IN µH
LAU

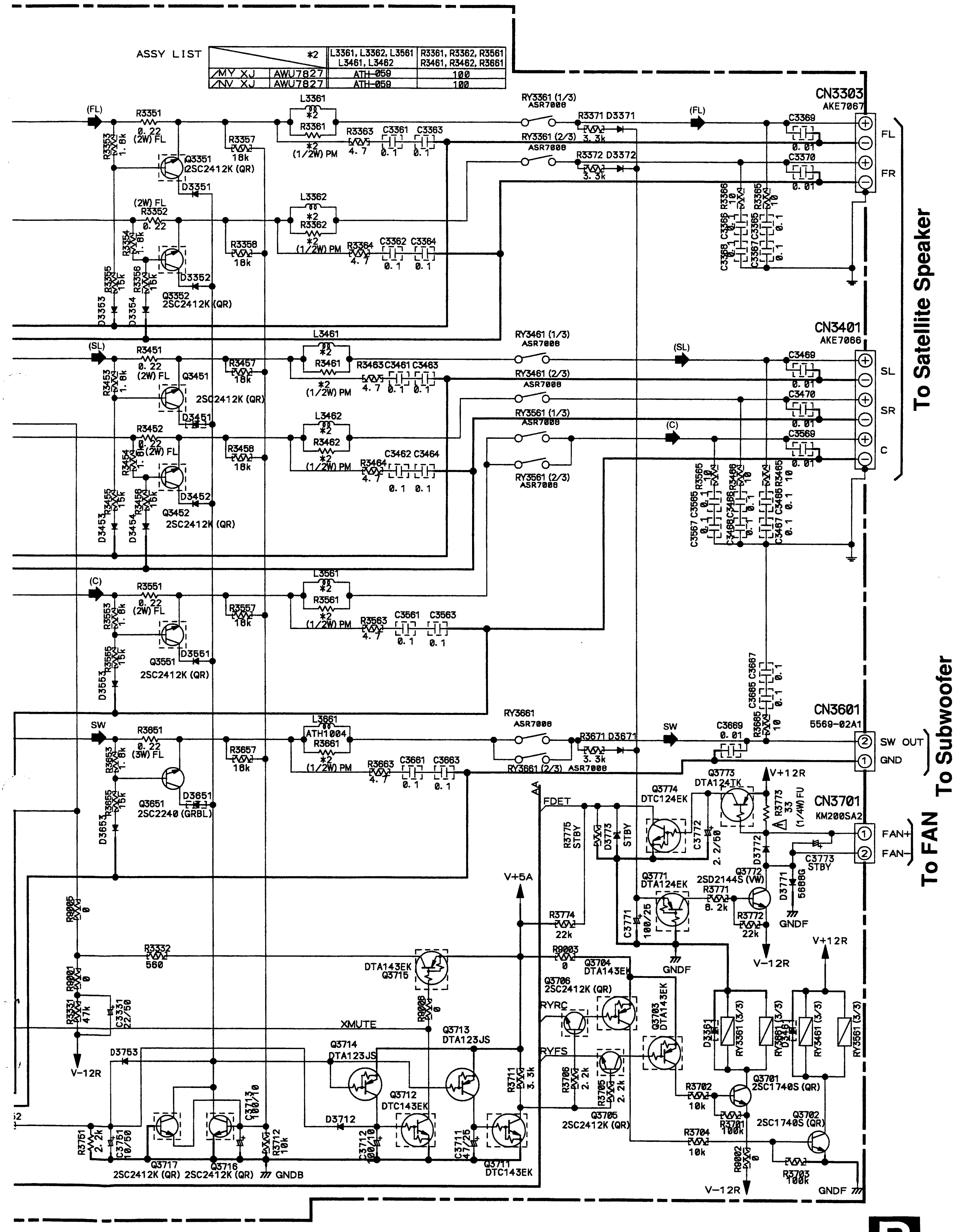
ALL RESISTORS ARE IN Ω
1/10W or 1/16W
FU : RFA1/4PS
FL : RS (1 or 2) LMF
PM : RD1/2PM
(OTHER : RD1/4PU)

NO MARK DIODE
1SS133

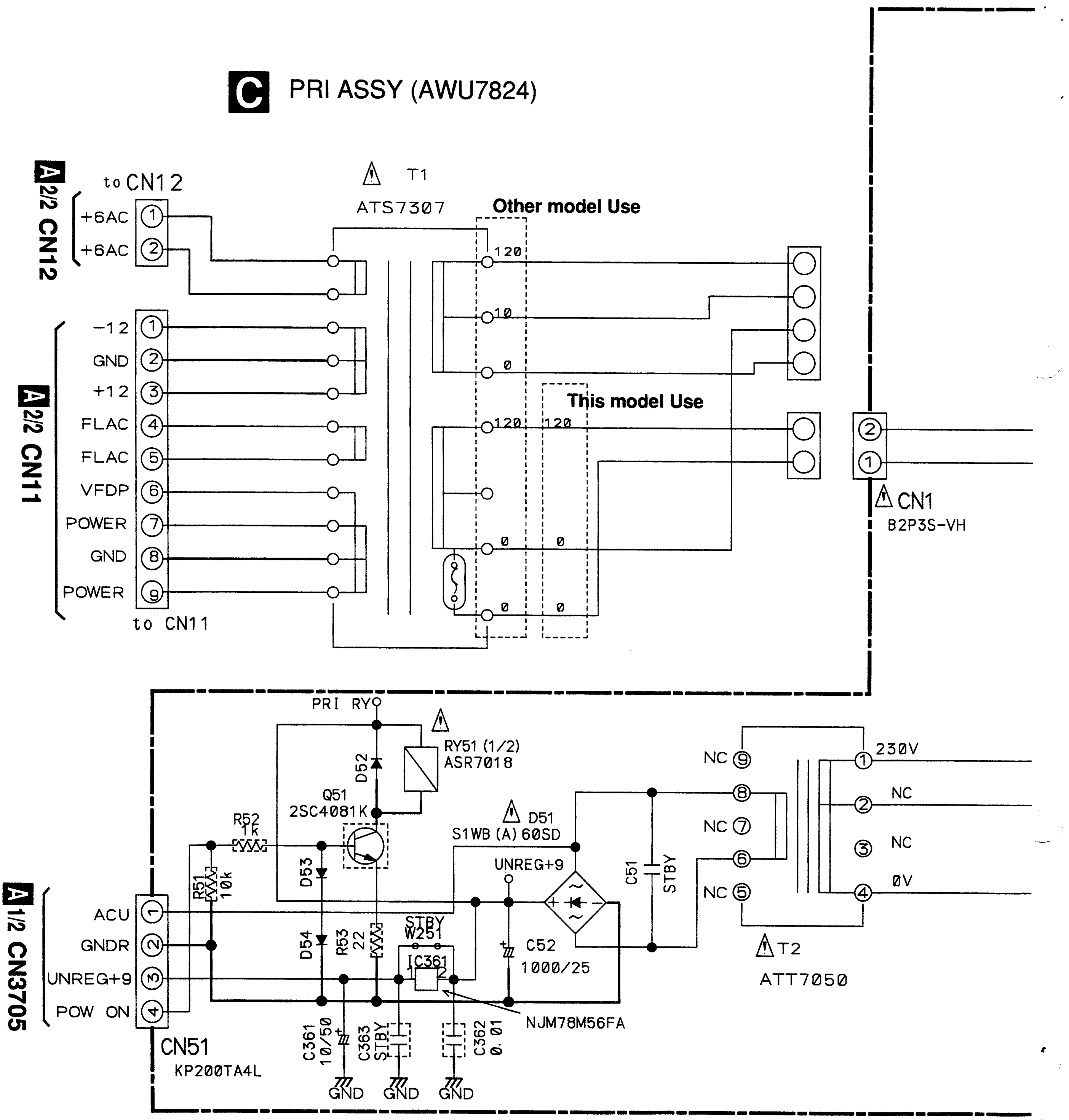
➡ : Audio Signal Route

ASSY LIST

*2		L3361, L3362, L3561 L3461, L3462	R3361, R3362, R3561 R3461, R3462, R3661
/MY XJ	AWU7827	ATH-059	100
/NV XJ	AWU7827	ATH-059	100


(FL)
R3351
0.22
(2W) FL
R3353
1.8k
Q3351
2SC2412K (QR)
D3351
R3357
18k
L3361
*2
R3361
(1/2W) PM
R3363
4.7
C3361
0.1
C3363
0.1
RY3361 (1/3)
ASR7008
RY3361 (2/3)
ASR7008
R3371 D3371
3.3k
R3372 D3372
3.3k
CN3303
AKE7067
C3369
0.01
C3370
0.01
FL
FR
R3366
10
R3365
10
C3368 C3366
C3367 C3365
0.1
(2W) FL
R3352
0.22
R3354
1.8k
R3358
18k
L3362
R3362
R3364
4.7
C3362 C3364
0.1 0.1
D3352
R3355
15k
R3356
15k
Q3352
2SC2412K (QR)
D3353
D3354
L3461
R3461
(SL)
R3451
0.22
(2W) FL
R3453
1.8k
Q3451
2SC2412K (QR)
R3457
18k
R3463 C3461 C3463
4.7
RY3461 (1/3)
ASR7008
RY3461 (2/3)
ASR7008
CN3401
AKE7066
C3469
0.01
C3470
0.01
SL
SR
C
D3451
R3452
0.22
(2W) FL
R3454
1.8k
R3458
18k
L3462
R3462
R3464
4.7
C3462 C3464
0.1 0.1
RY3561 (1/3)
ASR7008
RY3561 (2/3)
ASR7008
(C)
C3569
0.01
R3565
10
R3466
10
R3465
10
C3567 C3565
C3468 C3466
C3467 C3465
0.1
D3452
R3455
15k
R3456
15k
Q3452
2SC2412K (QR)
D3453
D3454
To Satellite Speaker
(C)
R3551
0.22
(2W) FL
R3553
1.8k
R3557
18k
L3561
R3561
R3563
4.7
C3561 C3563
0.1 0.1
D3561
Q3551
2SC2412K (QR)
R3555
15k
D3553
C3665 C3667
0.1 0.1
R3665
10
SW
R3651
0.22
(3W) FL
R3653
1.8k
R3657
18k
L3661
ATH1004
R3661
R3663
4.7
C3661 C3663
0.1 0.1
RY3661
ASR7008
RY3661 (2/3) ASR7008
R3671 D3671
3.3k
SW
C3669
0.01
CN3601
5569-02A1
SW OUT
GND
To Subwoofer
D3651
Q3651
2SC2240 (GRBL)
R3655
15k
D3653
AA
FDET
Q3774
DTC124EK
Q3773
DTA124TK
V+12R
R3773
33
(1/4W) FU
CN3701
KM200SA2
FAN+
FAN-
To FAN
R3775
STBY
D3773
STBY
C3772
2.2/50
D3772
C3773
STBY
Q3771
DTA124EK
Q3772
2SD2144S (VW)
R3771
8.2k
D3771
5688G
R3772
22k
GNDF
V-12R
C3771
100/25
R3774
22k
V+5A
R9005
0
R3332
560
R9003
0
DTA143EK
Q3715
Q3704
DTA143EK
GNDF
V+12R
R9001
0
R3331
47k
C3331
22/50
R9006
0
Q3706
2SC2412K (QR)
RYRC
Q3703
DTA143EK
XMUTE
Q3713
DTA123JS
Q3714
DTA123JS
RYFS
D3361
RY3361 (3/3)
RY3661 (3/3)
RY3461 (3/3)
RY3561 (3/3)
V-12R
D3753
R3711
3.3k
R3706
2.2k
R3705
2.2k
Q3712
DTC143EK
Q3705
2SC2412K (QR)
R3702
10k
Q3701
2SC1740S (QR)
R3701
100k
Q3702
2SC1740S (QR)
C3713
100/10
D3712
R3761
2.2k
C3761
10/50
R3712
10k
C3712
100/10
C3711
47/25
R3704
10k
R9002
0
R3703
100k
Q3717
2SC2412K (QR)
Q3716
2SC2412K (QR)
GNDB
Q3711
DTC143EK
V-12R
GNDF

3.5 PRI ASSY


C PRI ASSY (AWU7824)
A 2/2 CN12
to CN12
+6AC ①
+6AC ②
T1
ATS7307
Other model Use
120
10
0
A 2/2 CN11
−12 ①
GND ②
+12 ③
FLAC ④
FLAC ⑤
VFDP ⑥
POWER ⑦
GND ⑧
POWER ⑨
to CN11
This model Use
120
120
0
0
0
0
②
①
CN1
B2P3S-VH
PRI RY
RY51 (1/2)
ASR7018
D52
Q51
2SC4081K
R52
1k
D51
S1WB (A) 60SD
UNREG+9
D53
R51
10k
C51
STBY
A 1/2 CN3705
ACU ①
GNDR ②
UNREG+9 ③
POW ON ④
CN51
KP200TA4L
D54
R53
22
STBY
W251
IC361
1
2
C52
1000/25
NJM78M56FA
C361
10/50
C363
STBY
C362
0.01
GND
GND
GND
NC ⑨
⑧
NC ⑦
⑥
NC ⑤
230V ①
NC ②
NC ③
0V ④
T2
ATT7050

NOTES ALL CAPACITORS ARE IN µF
UNLESS OTHERWISE SPECIFIED

TY : CFTYA

CKSRYB✻✻

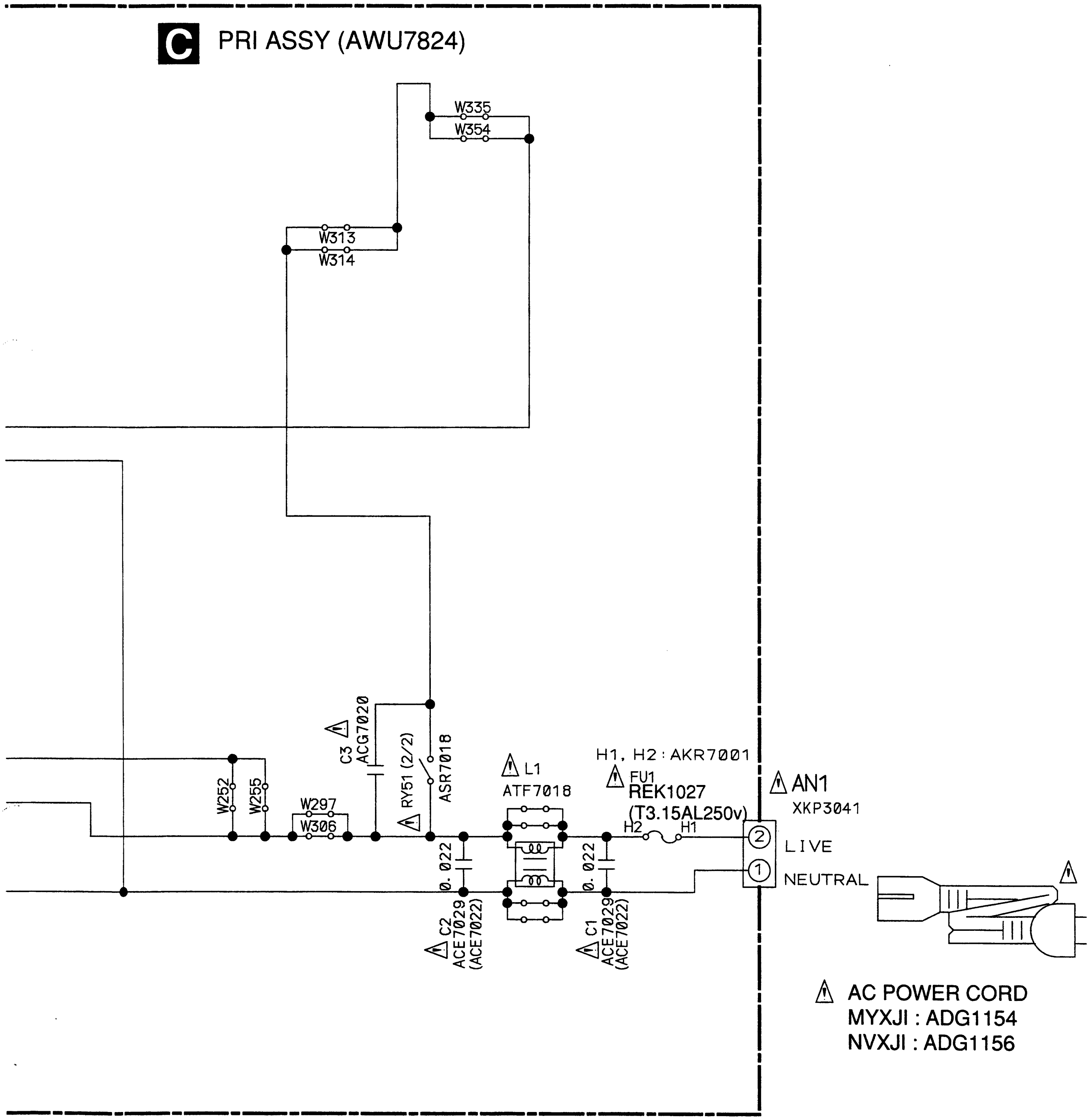
: RS1/16S

CEAT✻✻✻M##

: 1SS133

• NOTE FOR FUSE REPLACEMENT

CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE WITH SAME TYPE AND RATINGS ONLY.

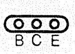
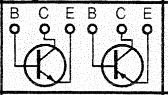
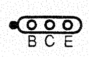
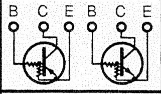
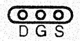
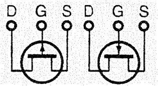
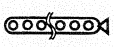
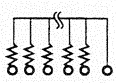
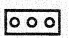
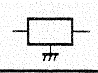

C PRI ASSY (AWU7824)
W335
W354
W313
W314
W252
W255
W297
W306
C3 ACG7020
RY51 (2/2) ASR7018
0.022
C2 ACE7029 (ACE7022)
L1 ATF7018
0.022
C1 ACE7029 (ACE7022)
H1, H2 : AKR7001
FU1 REK1027 (T3.15AL250v)
H2
H1
AN1 XKP3041
②
①
LIVE
NEUTRAL
AC POWER CORD
MYXJI : ADG1154
NVXJI : ADG1156

4. PCB CONNECTION DIAGRAM

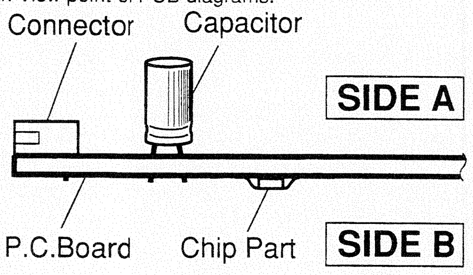
4.1 AF ASSY

NOTE FOR PCB DIAGRAMS :

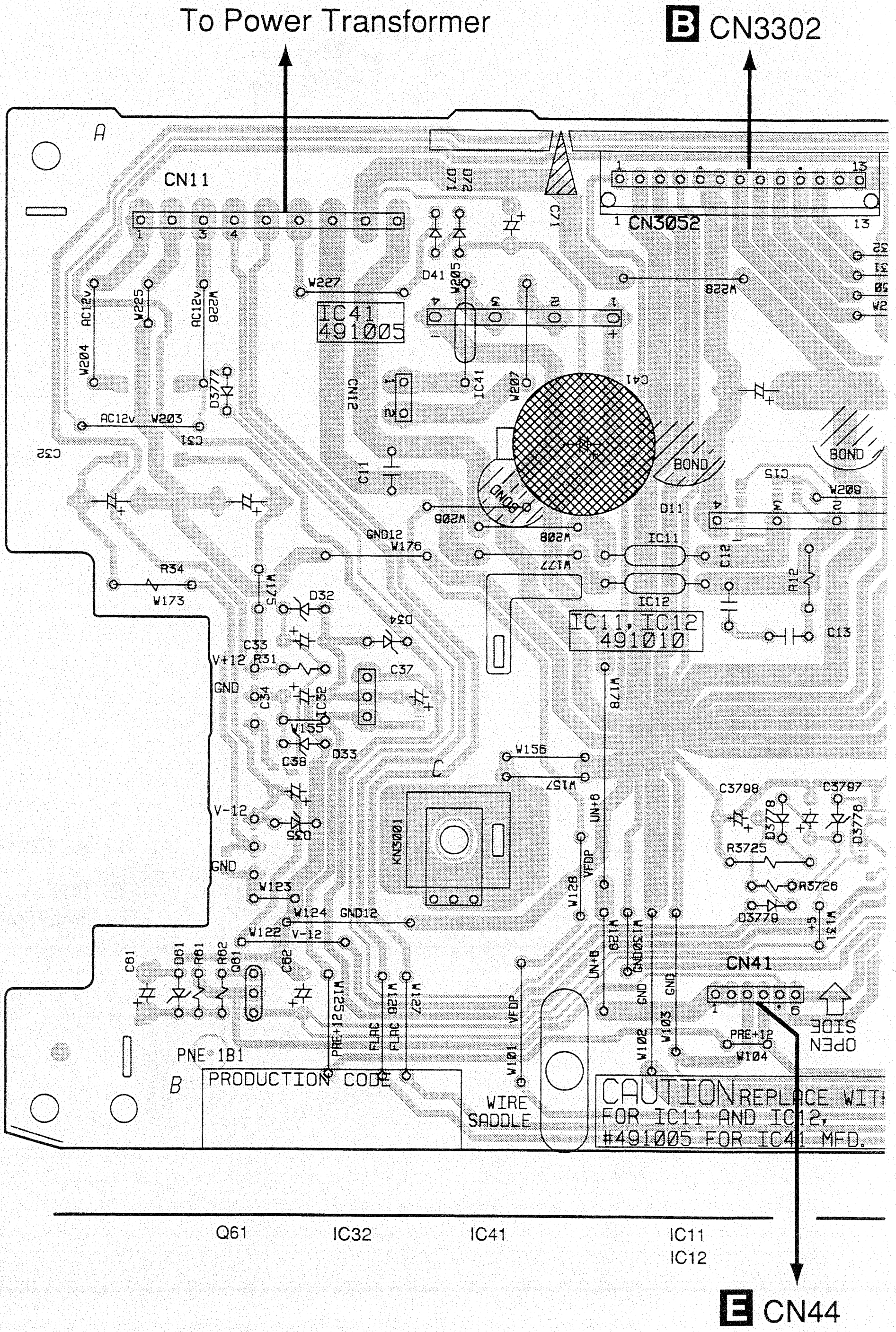
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

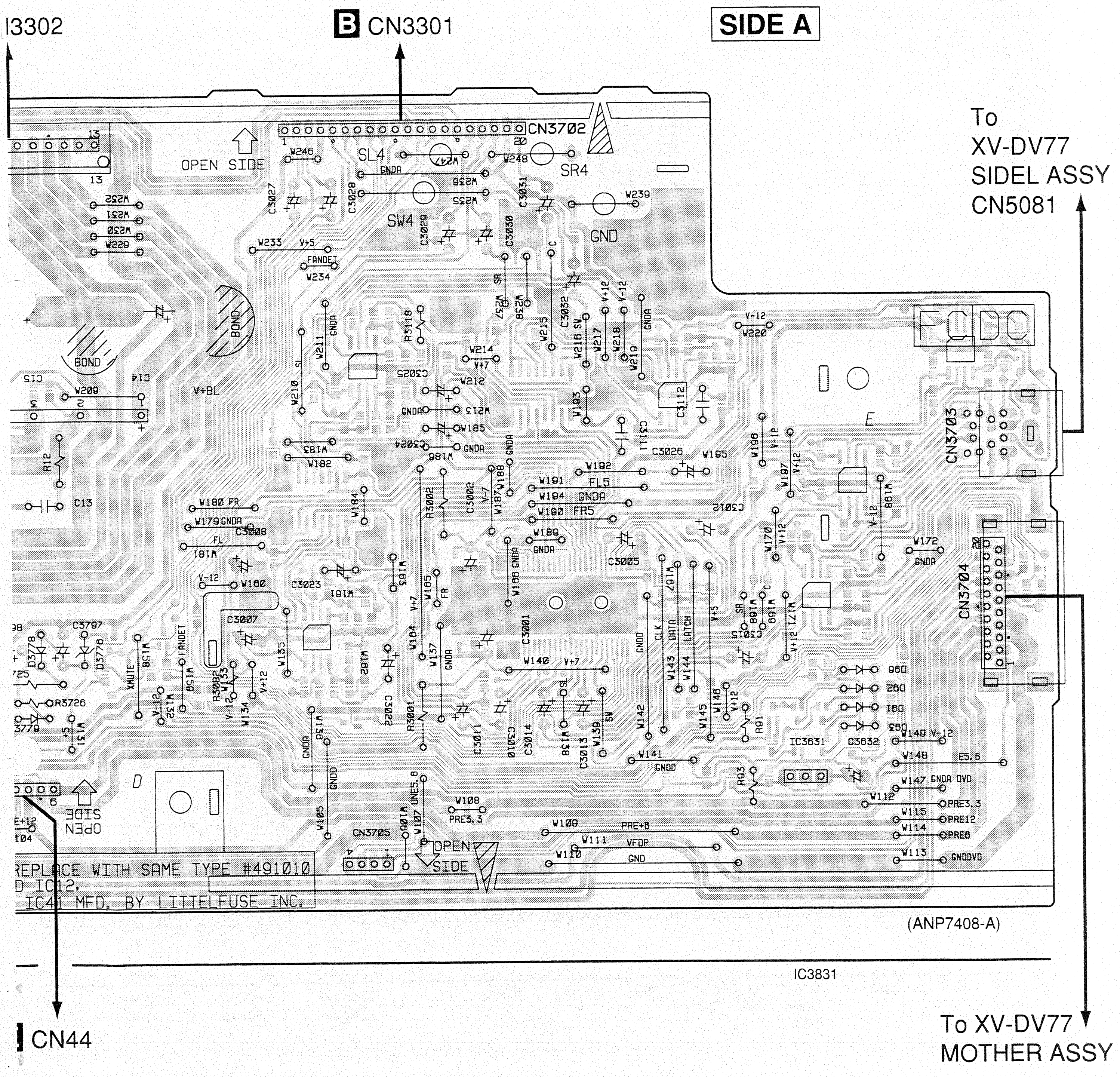
Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

3. The parts mounted on this PCB include all necessary parts for several destinations.
   For further information for respective destinations, be sure to check with the schematic diagram.
4. View point of PCB diagrams.

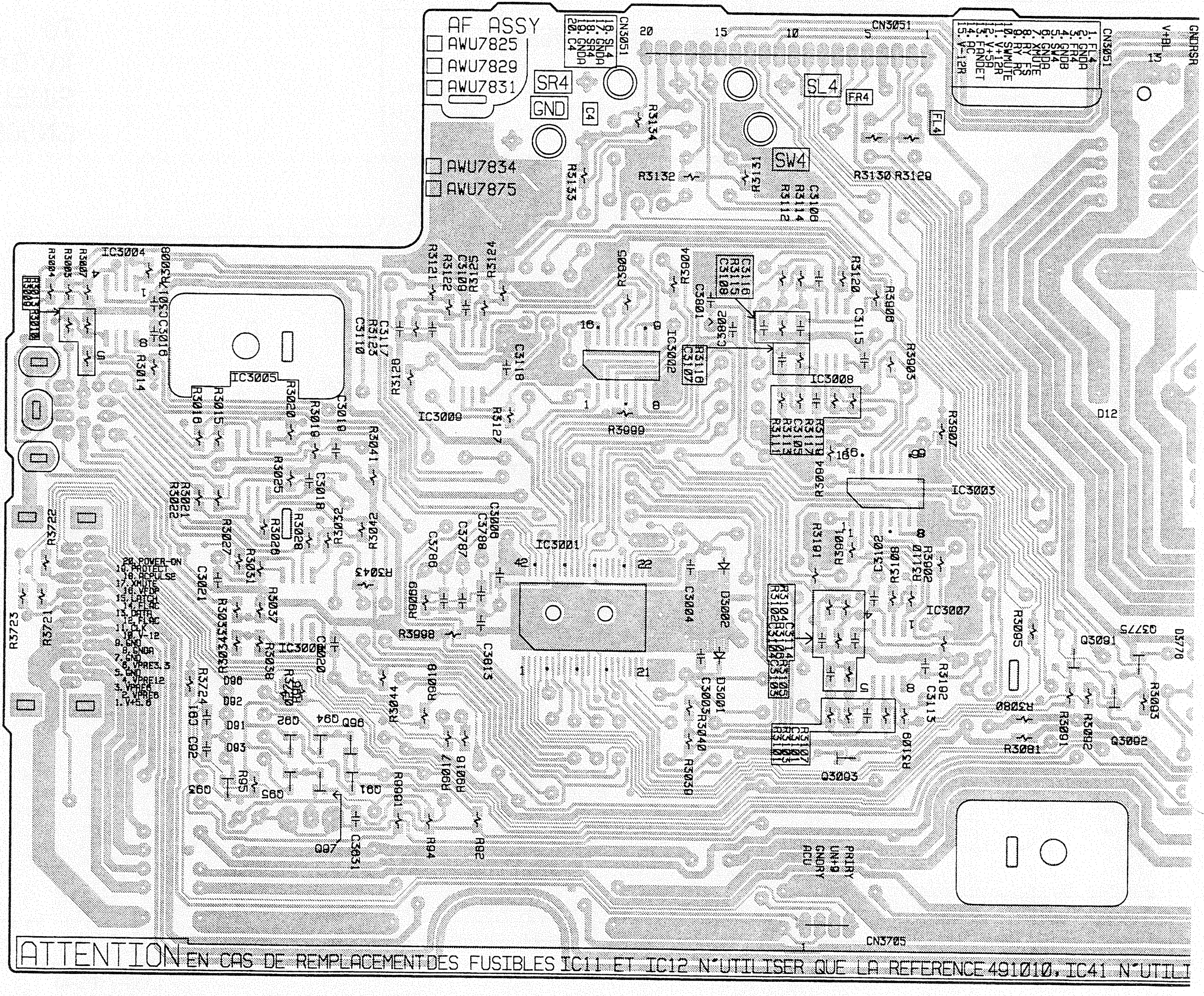

Connector
Capacitor
SIDE A
P.C.Board
Chip Part
SIDE B

A AF ASSY


To Power Transformer
B CN3302
CN11
CN3052
IC41
491005
C71
D41
CN12
IC11
IC12
IC11, IC12
491010
C11
C13
C12
D32
D33
D34
D35
C33
C34
C37
C38
R31
R34
V+12
GND
V-12
KN5001
CN41
OPEN SIDE
PRE+12
W104
C3798
C3797
R3725
R3726
D3779
C61
D61
R61
R62
Q61
C62
PNE 1B1
PRODUCTION CODE
WIRE SADDLE
CAUTION REPLACE WIT
FOR IC11 AND IC12,
#491005 FOR IC41 MFD.
BOND
Q61
IC32
IC41
IC11
IC12
E CN44

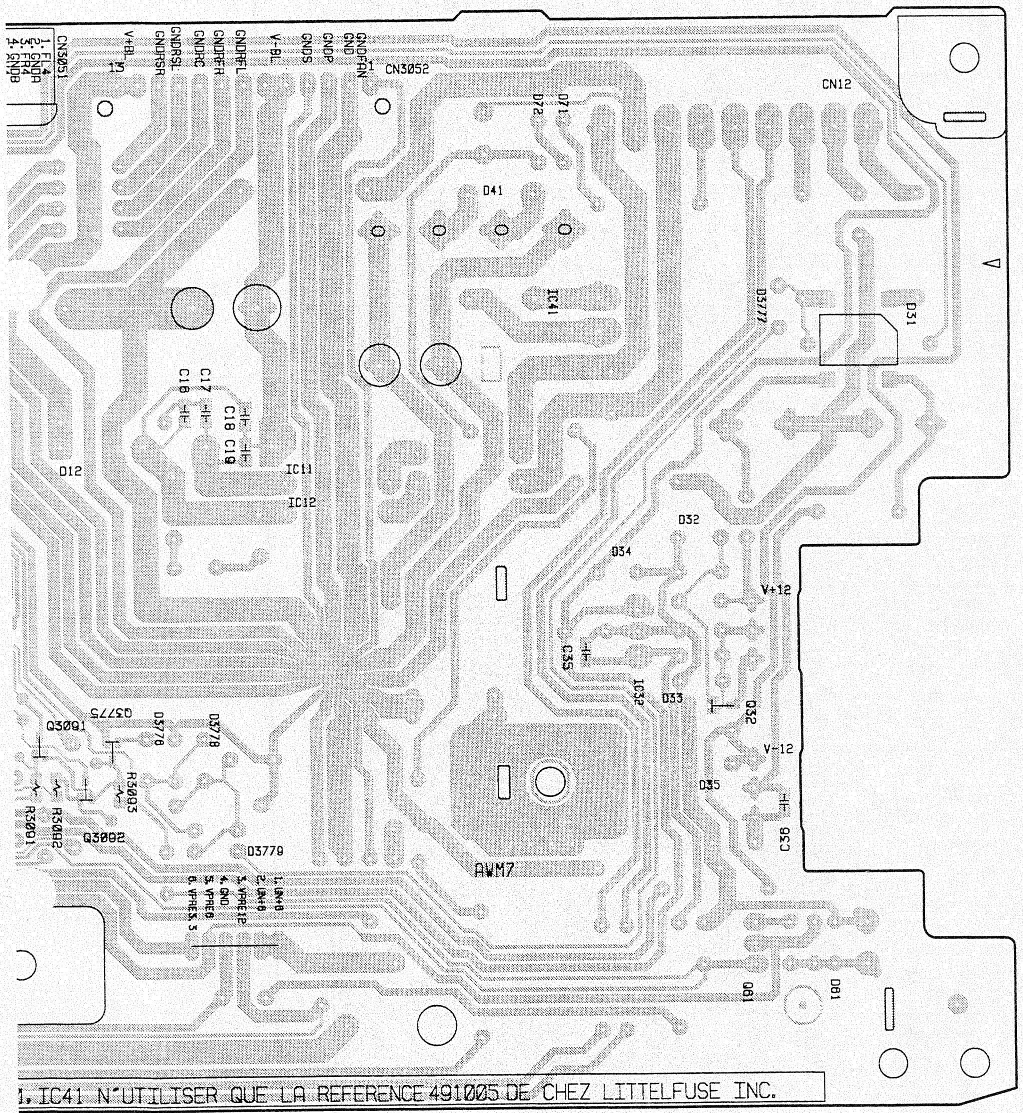

I3302
B CN3301
SIDE A
To
XV-DV77
SIDEL ASSY
CN5081
CN3702
OPEN SIDE
SL4
SR4
SW4
GND
BOND
V+BL
FCDC
CN3703
CN3704
IC3631
CN3705
OPEN SIDE
REPLACE WITH SAME TYPE #491010
D IC12,
IC41 MFD. BY LITTELFUSE INC.
(ANP7408-A)
IC3831
CN44
To XV-DV77
MOTHER ASSY

A AF ASSY


AF ASSY
☐ AWU7825
☐ AWU7829
☐ AWU7831
☐ AWU7834
☐ AWU7875
CN3051
SR4
GND
SL4
SW4
FR4
FL4
IC3004
IC3005
IC3009
IC3002
IC3008
IC3003
IC3001
IC3007
IC3006
CN3705
D12
ATTENTION EN CAS DE REMPLACEMENT DES FUSIBLES IC11 ET IC12 N'UTILISER QUE LA REFERENCE 491010, IC41 N'UTILI

IC3004 Q93 IC3005 Q94 Q96 IC3009 IC3001 IC3002 IC3008 IC3003 IC3091 IC3
IC300 Q97 Q91 IC3093 IC3007 IC3092
Q92
Q95

SIDE B

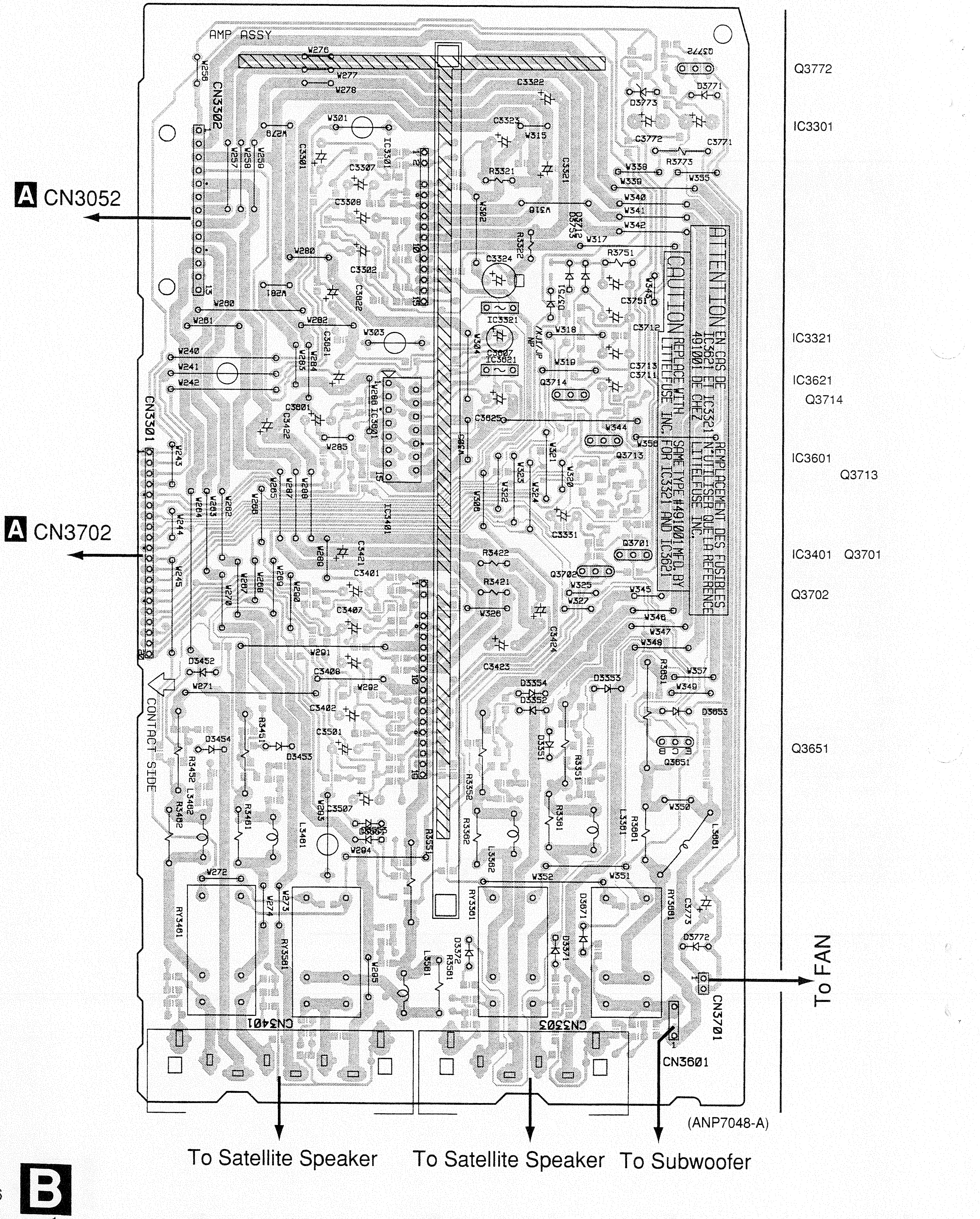

CN3051
1. FL4
2. GNDA
3. FR4
4. GNDB
V+BL
13
GNDRSR
GNDRSL
GNDRC
GNDRFR
GNDRFL
V-BL
GNDS
GNDP
GND
GNDFAN
1
CN3052
CN12
D71
D72
D41
IC41
D3777
D31
C17
C18
C18
C19
IC11
IC12
D12
D32
D34
V+12
C35
IC32
D33
Q32
V-12
D35
C36
Q3091
Q3775
D3776
D3778
R3093
R3091
R3092
Q3092
D3779
1. UN+B
2. UN+B
3. VPREIP
4. GND
5. VPREB
6. VPRE5.3
AWM7
Q61
D61
1. IC41 N'UTILISER QUE LA REFERENCE 491005 DE CHEZ LITTELFUSE INC.

(ANP7408-A)

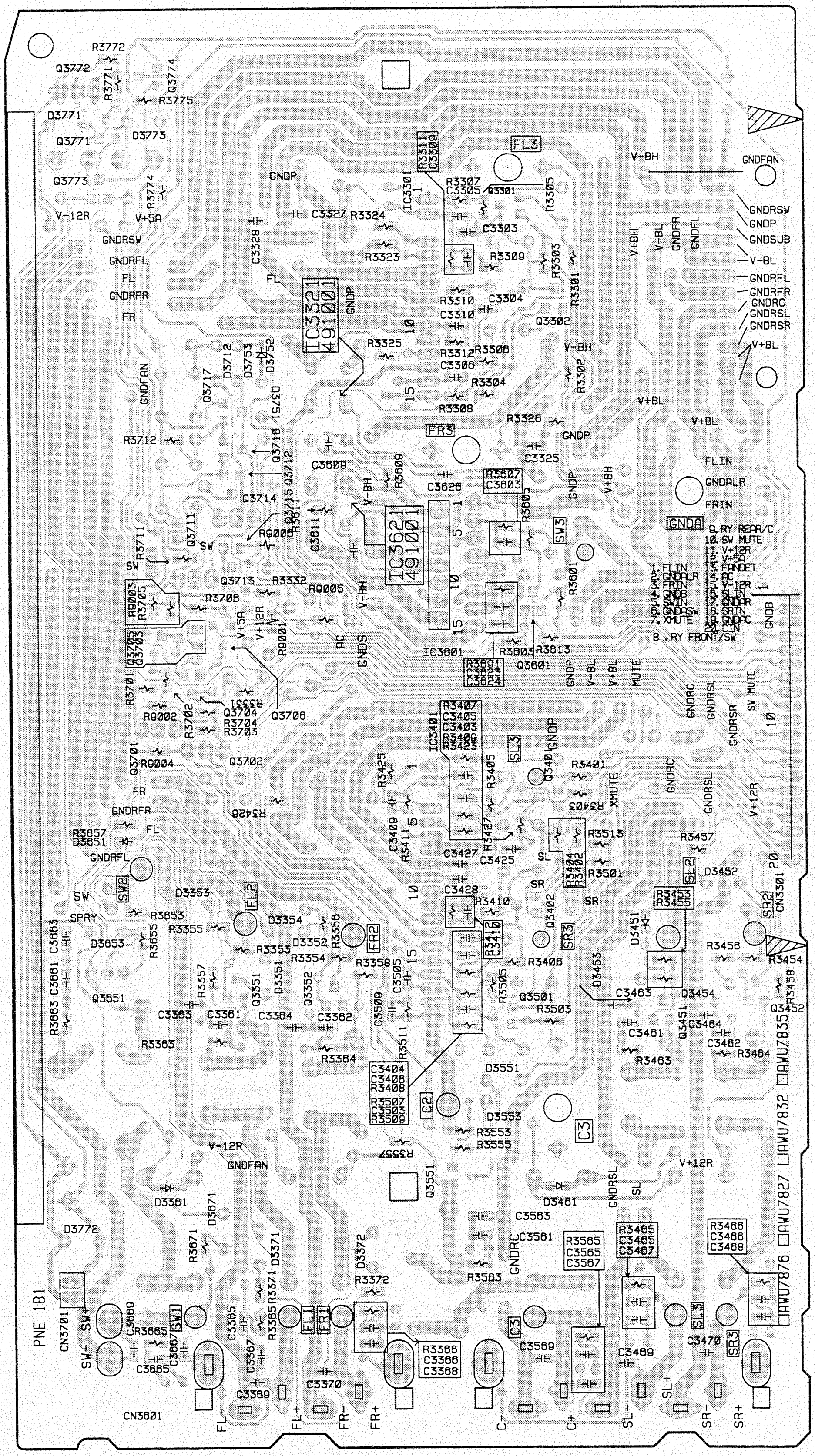
IC3091 IC3092	IC3775	IC12	IC41	IC32	Q32 Q61

4.2 AMP ASSY

B AMP ASSY **SIDE A**


AMP ASSY
A CN3052
A CN3702
CN3302
CN3301
CONTACT SIDE
CN3401
CN3303
CN3601
CN3701
To FAN
To Satellite Speaker
To Satellite Speaker
To Subwoofer
(ANP7048-A)
ATTENTION EN CAS DE REMPLACEMENT DES FUSIBLES IC3621 ET IC3321 N'UTILISER QUE LA REFERENCE 491001 DE CHEZ LITTELFUSE INC.
CAUTION REPLACE WITH SAME TYPE #491001 MFD. BY LITTELFUSE INC. FOR IC3321 AND IC3621
Q3772
IC3301
IC3321
IC3621
Q3714
IC3601
Q3713
IC3401
Q3701
Q3702
Q3651
RY3401
RY3501
RY3301
RY3601

SIDE B


R3772
Q3772
R3771
Q3774
R3775
D3771
Q3771
D3773
Q3773
R3774
V-12R
V+5A
GNDRSW
GNDRFL
FL
GNDRFR
FR
GNDFAN
Q3717
D3712
D3753
D3752
D3751
R3712
Q3716
Q3712
Q3714
Q3715
Q3711
R3711
SW
R9000
Q3713
R3332
R9005
R3706
R9003
R3705
Q3705
Q3703
R3701
Q3704
R3331
R3704
R3703
Q3706
R9002
R3702
Q3701
R9004
Q3702
GNDP
C3327
R3324
C3328
R3323
IC3321
491001
IC3301
R3311
C3309
FL3
R3307
C3305
Q3301
R3305
C3303
R3309
R3303
R3301
R3310
C3304
C3310
Q3302
R3325
R3312
R3306
C3306
R3304
R3308
V-BH
FR3
R3326
C3325
C3609
R3609
C3626
R3607
C3603
R3605
C3611
IC3621
491001
SW3
R3601
IC3601
R3603
R3613
Q3601
R3601
C3623
C3624
V+8H
V-BL
GNDFR
GNDFL
V+BL
GNDFAN
GNDRSW
GNDP
GNDSUB
GNDRFL
GNDRFR
GNDRC
GNDRSL
GNDRSR
FLIN
GNDALR
FRIN
GNDA
8. RY REAR/C
10. SW MUTE
11. V+12R
12. V+5A
13. FANDET
14. AC
15. SLIN
16. V-12R
17. GNDAR
18. SRIN
19. GNDAC
20. CIN
8. RY FRONT/SW
GNDB
MUTE
XMUTE
SW MUTE
V+5A
V+12R
R9001
AC
GNDS
R3407
C3405
C3403
IC3401
R3425
R3405
SL3
Q3401
R3401
R3403
R3426
C3409
R3411
R3427
C3427
C3425
R3513
R3457
SL
SR
R3404
R3402
R3501
SL2
D3452
CN3301
C3428
R3410
Q3402
SR3
D3451
R3455
SR2
R3856
R3454
R3458
Q3452
R3406
D3453
C3463
Q3454
Q3451
C3464
C3462
R3464
C3461
R3463
AWU7835
AWU7832
AWU7827
AWU7876
R3857
D3651
GNDRFL
SW2
SW
SPRY
D3353
FL2
R3653
R3355
D3354
FR2
D3653
R3655
C3663
C3661
R3663
Q3651
R3357
D3352
R3353
R3354
R3358
R3356
C3505
Q3351
D3351
Q3352
C3509
Q3501
R3503
R3505
R3511
C3363
C3361
C3364
C3362
R3363
R3364
C3404
C3408
R3408
R3507
R3503
R3506
C2
D3551
D3553
R3553
R3555
C3
R3557
Q3551
V-12R
GNDFAN
D3381
D3871
D3772
R3871
R3371
D3371
D3372
R3372
C3583
C3581
R3583
GNDRC
R3565
C3565
C3567
R3465
C3465
C3467
R3466
C3466
C3468
GNDRSL
V+12R
D3481
PNE 1B1
CN3701
SW+
SW-
C3669
R3665
SW1
C3667
C3665
C3365
C3367
R3365
FL1
FR1
C3369
C3370
R3366
C3368
C3386
C3
C3569
C3469
SL3
C3470
SR3
CN3801
FL-
FL+
FR-
FR+
C-
C+
SL-
SL+
SR-
SR+

(ANP7048-A)

A

Q3772 Q3774

Q3771

Q3301

IC3301

Q3302

Q3717

B

Q3716

Q3712

Q3714

Q3711

Q3713

IC3601

Q3705 Q3703 Q3701

Q3704 Q3706 IC3401

Q3701 Q3702 Q3041

C

Q3042

Q3651 Q3351 Q3501

Q3352

Q3451

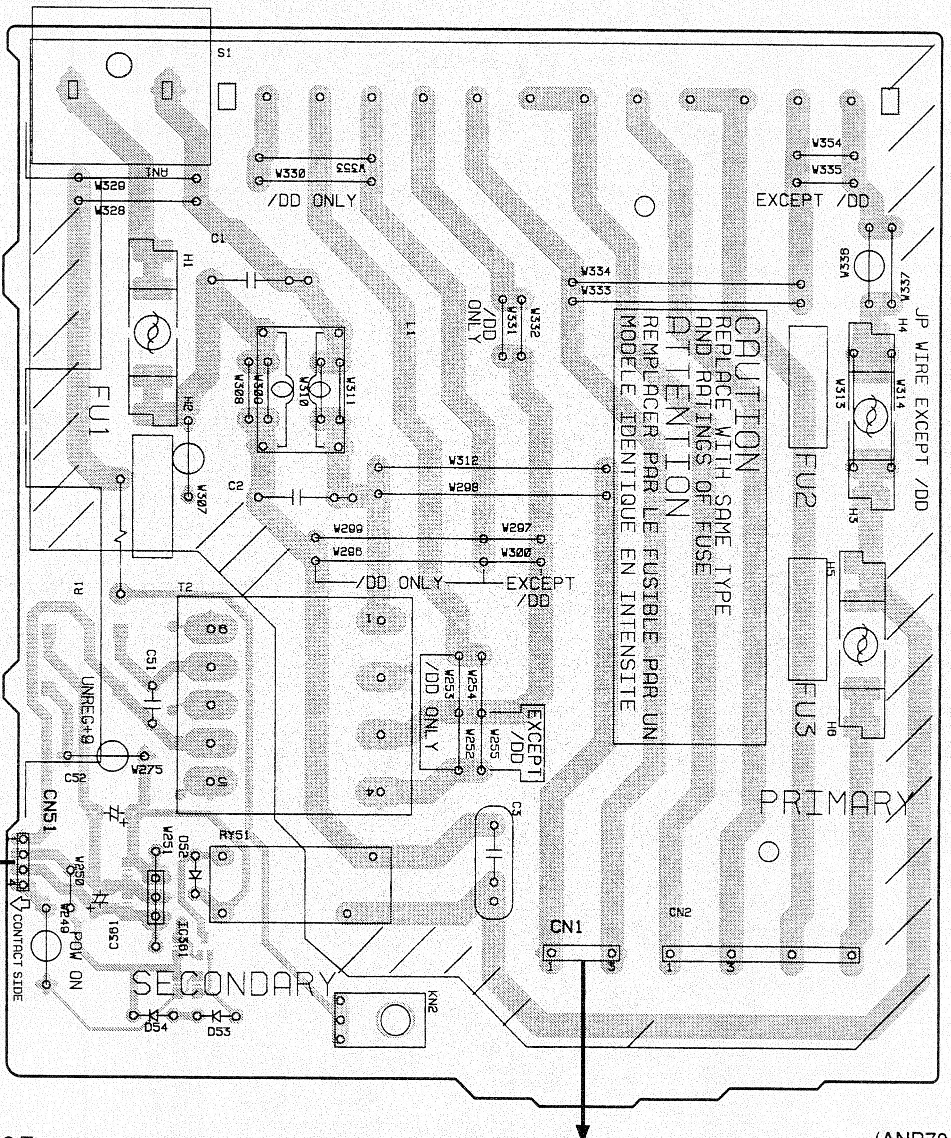
Q3551

D

4.3 PRI, REG and TRADE ASSYS

C PRI ASSY

SIDE A


S1
INA
W330
W353
/DD ONLY
W354
W335
EXCEPT /DD
W328
W329
C1
H1
H2
FU1
W307
W334
W333
W338
W337
JP WIRE EXCEPT /DD
H4
W313
W314
FU2
H3
L1
W331
W332
/DD ONLY
W308
W309
W310
W311
CAUTION
REPLACE WITH SAME TYPE
AND RATINGS OF FUSE
ATTENTION
REMPLACER PAR LE FUSIBLE PAR UN
MODELE IDENTIQUE EN INTENSITE
W312
W298
C2
W299
W297
W296
W300
/DD ONLY
EXCEPT /DD
R1
T2
H5
FU3
H6
C51
UNREG+9
W253
W254
W252
W255
/DD ONLY
EXCEPT /DD
W275
C52
CN51
PRIMARY
C3
RY51
W251
D52
W250
W249
C361
IC361
POW ON
CONTACT SIDE
CN1
CN2
SECONDARY
KN2
D54
D53

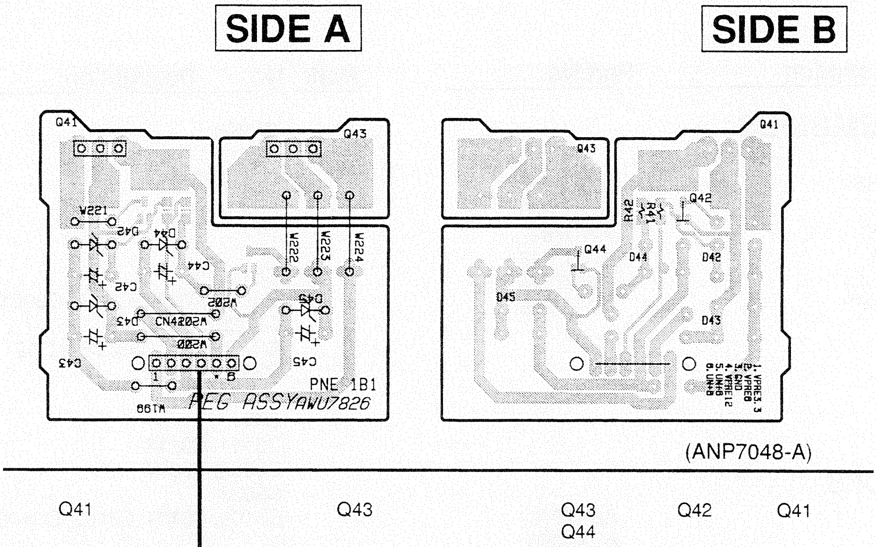
A CN3705

To Power Transformer T1

(ANP7048-A)

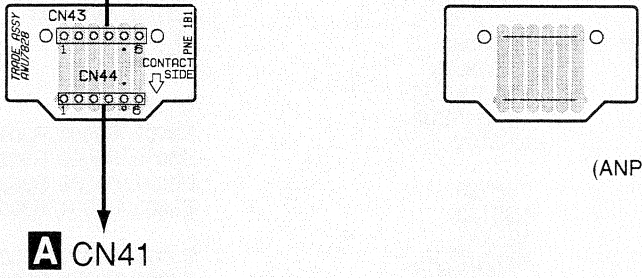
IC361

D REG ASSY


SIDE A
SIDE B
Q41
Q43
W221
D42
D44
C44
C42
W202
D45
D43
CN42
W200
C43
C45
W222
W223
W224
1
6
PNE 1B1
REG ASSY AWU7826
W198
Q42
R42
R41
Q44
D44
D42
D45
D43
1.VPRE5.3
2.VPREB
3.GND
4.VPRE12
5.UNHB
6.UNHB
Q41
Q43
Q43
Q44
Q42
Q41

(ANP7048-A)

E TRADE ASSY


CN43
CN44
TRADE ASSY AWU7828
PNE 1B1
CONTACT SIDE
1
6
A CN41

(ANP7048-A)

5. PCB PARTS LIST

NOTES: ● *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*

● *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*

● *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

$560\,\Omega \rightarrow 56\times10^{1} \rightarrow 561$ .... *RD1/4PU* $\boxed{5}\boxed{6}\boxed{1}$ *J*
$47k\,\Omega \rightarrow 47\times10^{3} \rightarrow 473$ .... *RD1/4PU* $\boxed{4}\boxed{7}\boxed{3}$ *J*
$0.5\,\Omega \rightarrow R50$ .... *RN2H* $\boxed{R}\boxed{5}\boxed{0}$ *K*
$1\,\Omega \rightarrow 1R0$ .... *RS1P* $\boxed{1}\boxed{R}\boxed{0}$ *K*

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

$5.62k\,\Omega \rightarrow 562\times10^{1} \rightarrow 5621$ .... *RN1/4PC* $\boxed{5}\boxed{6}\boxed{2}\boxed{1}$ *F*

LIST OF ASSEMBLIES

Mark	No.	Description	Part No.
NSP		DVD AMP ASSY	AWM7625
		├ AF ASSY	AWU7825
		├ AMP ASSY	AWU7827
		├ REG ASSY	AWU7826
		├ PRI ASSY	AWU7824
		└ TRADE ASSY	AWU7828

A AF ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠	IC41		AEK7046
⚠	IC31		AEK7050
⚠	IC71		AEK7060
⚠	IC11, IC12		AEK7068
	IC3004-IC3009		BA4558F-HT
	IC3002, IC3003		BU4053BCF
	IC3001		M62446FP
⚠	IC32		NJM7812FA
⚠	IC33		NJM7912FA
⚠	Q31		2SB1375
	Q3091, Q3092, Q32, Q96, Q97		2SC4081
⚠	Q61		2SD1858X
	Q92, Q94, Q95		DTA124EUA
	Q3093, Q3775		DTC143EUA
	Q91, Q93		UN5212
	D3777-D3779		1SS133
⚠	D91, D92		1SS133
	D93, D96		1SS133
⚠	D41		D3SBA20(B)
⚠	D11		D5SBA20(B)
	D32		MTZJ15C
	D33		MTZJ18B/C
	D3776		MTZJ2.7B
	D61		MTZJ5.6B
⚠	D31		S1WB(A)60SD
⚠	D71, D72		S5688G
	D3001, D3002		UDZS6.8B

CAPACITORS

Mark	No.	Description	Part No.
	C14, C15		ACH7121
	C3786-C3788		CCSRCH101J50
	C3005,C3007,C3008,C3015,C3032		CEAT100M50
	C3798		CEAT100M50
	C34		CEAT101M25
	C3012-C3014		CEAT1R0M50
	C33		CEAT220M50
	C71		CEAT221M63
	C31, C32		CEAT222M35
	C3010, C3011, C3027-C3031		CEAT2R2M50
	C3022-C3026		CEAT3R3M50
	C37, C3797, C38, C61, C62		CEAT470M25
	C3001, C3002		CEAT471M25
	C41		CEAT682M25
	C3111, C3112		CFTYA154J50
	C3003, C3004		CKSQYF473Z50
	C3033		CKSRYB105K6R3
	C3103, C3104, C3107, C3108, C3110		CKSRYB223K50
	C3101, C3102, C3105, C3106, C3109		CKSRYB822K50
	C3006, C3016-C3021, C3113-C3118		CKSRYF103Z50
	C35, C36, C3801, C3802		CKSRYF103Z50
	C91, C92		CKSRYF224Z16

RESISTORS

Mark	No.	Description	Part No.
	R3001, R3002		RD1/2PM101J
	R3725		RD1/2PM222J
	R3118, R91, R93		RD1/4PU103J
	R62		RD1/4PU220J
	R3726		RD1/4PU273J
	R31, R61		RD1/4PU471J
	R3007, R3008, R3013, R3014		RS1/16S1001F
	R3019, R3020, R3025, R3026		RS1/16S1001F
	R3031, R3032, R3037, R3038		RS1/16S1001F
	R3003, R3004, R3009, R3010		RS1/16S2201F
	R3015, R3016, R3021, R3022		RS1/16S2201F
	R3027, R3028, R3033, R3034		RS1/16S2201F
	Other Resistors		RS1/16S□□□J

OTHERS

Mark	No.	Description	Part No.
	CN3704	20P SOCKET	AKP7129
	CN3703	12P CONNECTOR	AKP7131
	CN3052	13P CONNECTOR SOCK.	AKP7155
	CN12	2P-VH CONNECTOR	B2P-VH
	CN11	9P TOP POST	B9P-VH
	J 1001	BOARD IN WIRW	DB020NT0
	CN3705	4P PLUG	KM200TA4
	CN41	6P PLUG	KM200TA6
	CN3702	PCB CONNECTOR	TUC-P20P-B1
	KN3001	EARTH METAL FITTING	VNF1084

B AMP ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠	IC3321, IC3621		AEK7009
⚠	IC3301		STK402-040
⚠	IC3401		STK402-240
⚠	IC3601		TDA7294V
	Q3701, Q3702		2SC1740S
	Q3651		2SC2240
	Q3351, Q3352, Q3451, Q3452, Q3551		2SC2412K
	Q3705, Q3706, Q3716, Q3717		2SC2412K
	Q3301, Q3302, Q3401, Q3402, Q3501		2SD2114K
	Q3601		2SD2114K
	Q3772		2SD2144S
	Q3713, Q3714		DTA123JS
	Q3771		DTA124EK
	Q3773		DTA124TK
	Q3703, Q3704, Q3715		DTA143EK
	Q3774		DTC124EK
	Q3711, Q3712		DTC143EK
	D3351-D3354, D3371, D3372		1SS133
	D3452-D3454,D3551,D3553,D3653		1SS133
	D3671,D3712,D3751,D3753,D3772		1SS133
	D3361,D3451,D3461,D3651,D3752		1SS355
	D3771		S5688G

COILS AND FILTERS

Mark	No.	Description	Part No.
⚠	L3361,L3362,L3461,L3462,L3561		ATH-059
⚠	L3661		ATH1004

SWITCHES AND RELAYS

Mark	No.	Description	Part No.
	RY3361,RY3461,RY3561,RY3661		ASR7008

CAPACITORS

Mark	No.	Description	Part No.
	C3309,C3310,C3409,C3410,C3509		CCSRCJ3R0C50
	C3307, C3308, C3321, C3322		CEAT100M50
	C3407,C3408,C3421,C3422,C3507		CEAT100M50
	C3601, C3751		CEAT100M50
	C3712, C3713		CEAT101M10
	C3771		CEAT101M25
	C3323, C3324, C3423, C3424		CEAT101M35
	C3621, C3622		CEAT101M50
	C3331, C3607, C3625		CEAT220M50
	C3301,C3302,C3401,C3402,C3501		CEAT2R2M50
	C3772		CEAT2R2M50
	C3711		CEAT470M25
	C3609		CKSRYB102K50
	C3603, C3623, C3624		CKSRYB103K50
	C3305,C3306,C3405,C3406,C3505		CKSRYB221K50
	C3303,C3304,C3403,C3404,C3503		CKSRYB471K50
	C3369,C3370,C3469,C3470,C3569		CKSRYF103Z50
	C3669		CKSRYF103Z50
	C3361-C3368,C3461-C3468,C3561		CKSRYF104Z25
	C3563,C3565,C3567,C3661,C3663		CKSRYF104Z25
	C3665, C3667		CKSRYF104Z25

RESISTORS

Mark	No.	Description	Part No.
	R3361,R3362,R3461,R3462,R3561		RD1/2PM101J
	R3661		RD1/2PM101J
⚠	R3321, R3322, R3421, R3422		RD1/4MUF101J
	R3751		RD1/4PU222J
⚠	R3773		RF1/4PS330J
	R9001, R9006		RS1/10S0R0J
	R3351, R3352, R3451, R3452, R3551		RS2LMFR22J
	R3651		RS3LMFR22J
	Other Resistors		RS1/16S□□□J

OTHERS

Mark	No.	Description	Part No.
	CN3601	2P CONNECTOR	5569-02A1
	CN3401	6P SPEAKER TERMMINAL	AKE7066
	3303	4P SPEAKER TERMMINAL	AKE7067
	CN3302	13P CONNECTOR PLUG	AKM7067
	CN3701	2P PLUG	KM200SA2
	CN3301	PCB CONNECTOR	TUC-P20X-B1

C PRI ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠	IC361		NJM78M56FA
	Q51		2SC4081
	D52–D54		1SS133
⚠	D51		S1WB(A)60SD

COILS AND FILTERS

Mark	No.	Description	Part No.
⚠	L1		ATF7018

TRANSFORMERS

Mark	No.	Description	Part No.
⚠	T2		ATT7050

SWITCHES AND RELAYS

Mark	No.	Description	Part No.
⚠	RY51		ASR7018

CAPACITORS

Mark	No.	Description	Part No.
⚠	C1, C2		ACE7029
⚠	C3		ACG7020
	C361		CEAT100M50
	C52		CEAT102M25
	C362		CKSRYB103K50

RESISTORS

Mark	No.	Description	Part No.
	Other Resistors		RS1/16S□□□J

OTHERS

Mark	No.	Description	Part No.
	H1, H2	FUSE CLIP	AKR7001
⚠	CN1	2P CONNECTOR	B2P3S-VH
	CN51	4P SOCKET	KP200TA4L
⚠	AN1	1P AC INLET	XKP3041

D REG ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠	Q41, Q43		2SB1375
	Q42, Q44		2SC4081
	D43		MTZJ12B
	D44		MTZJ5.6C
	D45		MTZJ7.5C
	D42		MTZJ9.1B

CAPACITORS

Mark	No.	Description	Part No.
	C42–C45		CEAT220M50

RESISTORS

Mark	No.	Description	Part No.
	R43		RD1/4PU560J
	Other Resistors		RS1/16S□□□J

OTHERS

Mark	No.	Description	Part No.
	42	6P CABLE HOLDER	51048-0600
	J 41	JUMPER WIRE 6P	D20PYY0605E

E TRADE ASSY

OTHERS

Mark	No.	Description	Part No.
	43	6P SOCKET	51048-0600
	CN44	6P CABLE HOLDER	KP200TA6L

6. ADJUSTMENT

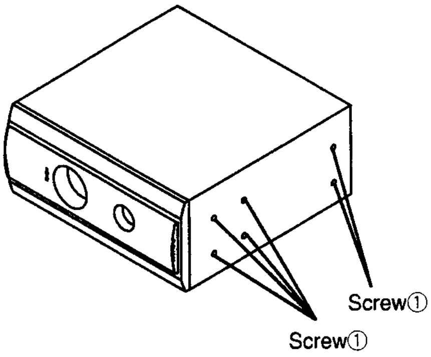
There is no information to be shown in this chapter.

7. GENERAL INFORMATION

7.1 DISASSEMBLY

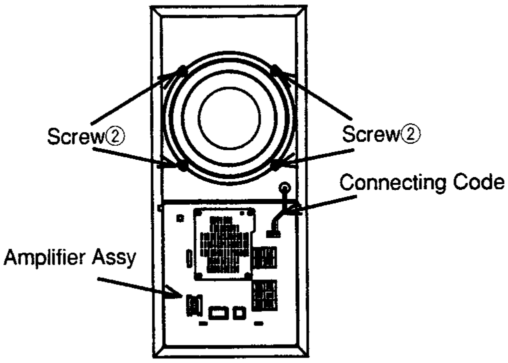
1. Removing the Amplifier Assy

1) The Amplifier Assy is attached to the cabinet by 6 external screws ①. To detach it, pull down the subwoofer toward the left side.
2) Then unfasten those screws ① .
3) Then stand up the speaker again. To detach the Amplifier Assy, first remove the connecting code. Then pull straight the Amplifier Assy toward back and remove it.



2. Removing the Subwoofer

1) The speaker element is attached to the back board by 4 external screws ②.To detach it, unfasten those screws.
2) When attaching it,face its terminal upward.



3. Removing the Cosmetic Baffle

1) The cosmetic baffie is attached to the baffle by press-fitting. To detach it,pry it open by inserting a flat blade screwdriver into lower side.

4. Removing the Cosmetic Duct

1) The cosmetic baffle, those screws are removed when removing the cosmetic duct attached in cosmetic baffle with 8 screws.

8. SPECIFICATIONS

Amplifier Section

Subwoofer 50W (100Hz, 1% T.H.D.,4Ω)
Surround (Reference)
Front,Center,Rear .... 30W,per channel(1KHz, 1% T.H.D.,8Ω)
Continuous power output (RMS)
Subwoofer 65W (100Hz, 10% T.H.D.,4Ω)
Surround (Reference)
Front,Center,Rear .... 40W,per channel(1KHz, 10% T.H.D.,8Ω)

Speaker Section

Powered subwoofer

Type .... BASS reflex floor type,antimagnetic (EIAJ)
Speaker .... 16cm (6 in.) (cone type)
Nominal impedance 4Ω
Frequency range .... 31Hz to 300 Hz
Max. input .... 65W (EIAJ)

Front, Rear, Center speakers (Reference)

Type Sealed ,antimagnetic (EIAJ)
Speaker .... 8.7cm (3-7/16 in.) (cone type)
Nominal impedance 8Ω
Frequency range .... 100Hz to 20,000 Hz
Max. input .... 40W (EIAJ)

Power Supply Section

Power requirements (/MYXJI Model) AC220-230V, 50/60Hz
Power requirements (/NVYXJI Model) AC230V, 50/60Hz

Power consumption (DVD Tuner + Powered subwoofer) 166W

Power consumption in standby mode 1W

Miscellaneous

Powered subwoofer unit

Dimensions .... 190 (W) × 418 (D) × 420 (H) mm
(7-1/2 (W) × 16-3/4 (D) × 17 (H)in.)
Weight .... 13.9 kg (30.64 lbs)

Front, Rear speakers (Reference)

Dimensions (S-DV77ST) .... 112 (W) × 77 (D) × 144 (H) mm
(4-5/16 (W) × 2-15/16 (D) × 6 (H)in.)
Weight (S-DV77ST) .... 0.77 kg (1.7 lbs)

Center speaker (Reference)

Dimensions (S-DV77ST) .... 196 (W) × 76 (D) × 105 (H) mm
(8-1/2 (W) × 2-15/16 (D) × 4-5/16 (H)in.)
Weight (S-DV77ST) .... 0.82 kg (1.8 lbs)

Note :Specification and the desine is subject to possible modiffication without notice due to improvement.